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GEORGE OTIS SMITH, Director

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# WATER RESOURCES OF CALIFORNIA

## PART III

## STREAM MEASUREMENTS IN THE GREAT BASIN AND PACIFIC COAST RIVER BASINS

PREPARED UNDER THE DIRECTION OF JOHN C. HOYT

BY

H. D. McGLASHAN AND H. J. DEAN

---

In cooperation with the State Water Commission and the Conservation Commission of the State of California

WASHINGTON
GOVERNMENT PRINTING OFFICE
1913

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DEPARTMENT OF THE INTERIOR

UNITED STATES GEOLOGICAL SURVEY

GEORGE OTIS SMITH, DIRECTOR

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# WATER RESOURCES OF CALIFORNIA.

## PART III. STREAM MEASUREMENTS IN THE GREAT BASIN AND PACIFIC COAST RIVER BASINS.

By H. D. McGlashan and [illegible] Clark

### INTRODUCTION.

The water resources of California have played an important part in the development of the State.

Repairs to a mill race near Georgetown, Eldorado County, in 1848 led to the discovery of gold, and the development of the gold-mining industry was due largely to the location of the deposits near the water necessary for hydraulicking.

The water available for irrigation and domestic supply has been the chief factor in the development of southern California, which now has a population of more than 1,000,000 people.

The growth of irrigation systems in the great interior valley is bringing about its subdivision into small ranches devoted to the intensive farming which affords almost limitless opportunities to the agriculturist.

An increased water supply for the city of San Francisco is one of its greatest necessities, and more water for Los Angeles is to be brought from Owens Valley—a distance of more than 200 miles—at a cost of $23,000,000.

The many mountain streams of California afford abundant hydro-electric power, the utilization of which in manufacturing enterprises and in transportation has been made possible by the progress of electric-power transmission during the last decade. To-day California probably leads the country in the number and length of her power transmission lines.

Information concerning the quantity of water carried by the streams has been and will continue to be an important factor in the development of these resources, for the fundamental importance of stream-flow data is now so thoroughly recognized that it is almost impossible to finance any project depending on stream flow without presenting authentic records of flow covering a period of years.

The measurements of the flow of streams in California was begun by the California State engineer in 1878, in accordance with the law requiring him "to investigate the problems of the irrigation of the plains, the condition and capacity of the great drainage lines of the State, and the improvement of the navigation of rivers." The work was restricted to a few localities in the Sacramento and San Joaquin River basins, the principal station being on the Sacramento at Collinsville.

The State engineer's office was discontinued in 1884, and practically no further stream studies were made until 1894, when engineers of the United States Geological Survey were sent into California and made a few measurements of streams in the semiarid parts of the State. In the following year the Survey established a station on Sacramento River at Red Bluff and since that time has gradually extended the work until it now has available records of flow at 340 stations on California streams. Many records have also been collected by private parties. The first stations were located only on streams whose waters were to be used for irrigation, but records are now available on streams adapted to all uses, including navigation, domestic water supply, and power.

To make the information available six reports are being prepared. The reports are to be published as water-supply papers and will bear the following titles:

295. Gazetteer of surface waters of California, Part I, Sacramento River basin.
296. Gazetteer of surface waters of California, Part II, San Joaquin River basin.
297. Gazetteer of surface waters of California, Part III, Great Basin and Pacific coast streams.
298. Water resources of California, Part I, Stream measurements in Sacramento River basin.
299. Water resources of California, Part II, Stream measurements in San Joaquin River basin.
300. Water resources of California, Part III, Stream measurements in Great Basin and Pacific coast river basins.

The gazetteers embrace descriptions of all the streams named on the best available maps; the stream-measurement reports describe the streams that have been measured and the stations at which the work has been carried on and present the results of the studies of stream flow.

The investigations of the quantity of water in the streams have been supplemented by studies of the climate and other factors affecting stream flow, and a mass of valuable information has thus been collected [illegible] work.

[illegible] of this report [illegible] made [illegible] which had already been published [illegible] however [illegible] those [illegible]

## COOPERATION AND ACKNOWLEDGMENTS.

Cooperation in stream measurements between the United States Geological Survey and State of California was first provided for by the State legislature in an act approved March 18, 1903. This act covered the period from July 3, 1903, to June 30, 1905, and was in substance as follows:

> The State board of examiners are hereby empowered to enter into contracts with the Director of the United States Geological Survey for the purpose of making topographic maps to the extent of twenty thousand dollars; also for the purpose of measuring streams; surveying reservoir sites and canal locations, for the conservation and utilization of the flood and storm waters of the State, to the extent of fifteen thousand dollars. * * *

Similar acts, approved March 20, 1905, and March 11, 1907, provided for the continuation of the work until June 30, 1909, with an increased biennial appropriation of $30,000 for topography and $20,000 for hydrography. The act of March 11, 1907, named the Department of Engineering of the State of California as the cooperating party.

An act placing cooperation between the State of California and the United States Geological Survey on a permanent basis was approved April 22, 1909, and provided as follows:

> The Department of Engineering is hereby empowered to carry on topographic surveys and investigations into matters pertaining to the water resources of the State along the lines of hydrography, hydro-economics and the use and distribution of water for agricultural purposes, and to that end, where possible and to the best interest of the State, shall enter into contracts for cooperation with the different departments of the Federal Government in such amounts as may be an equitable and necessary division of the work. The State engineer, with the consent of the governor, may maintain and continue such investigations where there is available money not covered by cooperation contract. For the permanent maintenance of said surveys and investigations there is hereby continuously appropriated out of the general fund of the State treasury for each and every fiscal year, commencing with the date upon which this act becomes effective, the sum of thirty thousand dollars.

Of this sum $9,000 is allotted annually to investigations of water resources.

In 1911 the California Legislature provided for a State Board of Control (Water Powers) to pass on matters pertaining to the appropriation of water for power development, and for a Conservation Commission to investigate and collect information concerning forestry, water, and other natural resources and their use, for the purpose of revising the laws of the State relating thereto. The legislature of 1912 transferred the duties of the State Board of Control (Water Powers) to the State water commission.

In present work the State of California is represented by the Department of Engineering, State of California, W. F. McClure, State engineer; by the Conservation Commission, George C. Pardee

...ertain ... and by the State
... arles L. ... lark.
... W. ... McLure.

... ... ssions.

... beginning in ...
... State engineer.
... among whom was ...
... investigation and frequently
... engineer's ... partment was
... survey was begun
... chief ... hydrographer.
... the establishment
... ... Lippincott
... ... the field work was
... ... and Samuel ...
... amation Service from the
... became district engineer.
... ... ... ... Ghiashan was
...

... in the field work, and as their
... measurements which have
... ... special acknowledgment
... ... who was Mr. Clapp's
... ... ... ember, ..., when he was
... ... records have been collected
... ... ... ... ... result is given in
... ...

## THE GREAT BASIN.

### GENERAL FEATURES.

... ... Great Basin forms part of the
... ... Lake Bonneville, G. K. Gilbert:[1]

... ... ... is drained by streams flowing to
... ... ... having no outward drainage. The
... ... ... achieved an adequate conception
... ... ... still universally known by that
... ... single cup-shaped depression gathering
... ... ... varied surface, naturally divided
... ... ... drainage districts. It lies near the western
... ... ... rivers tributary to the Pacific Ocean.
... ... basin of the Columbia, on the east by
... ... ... ... basins of the San Joaquin,
... ... ... The central portion of the western
... ... ... Nevada, one of the greatest mountain masses

[1] ... ... vol. I, 1890, pp. 2 ... 12; Pl. II. This report is
... ... ... libraries of most of the larger cities.

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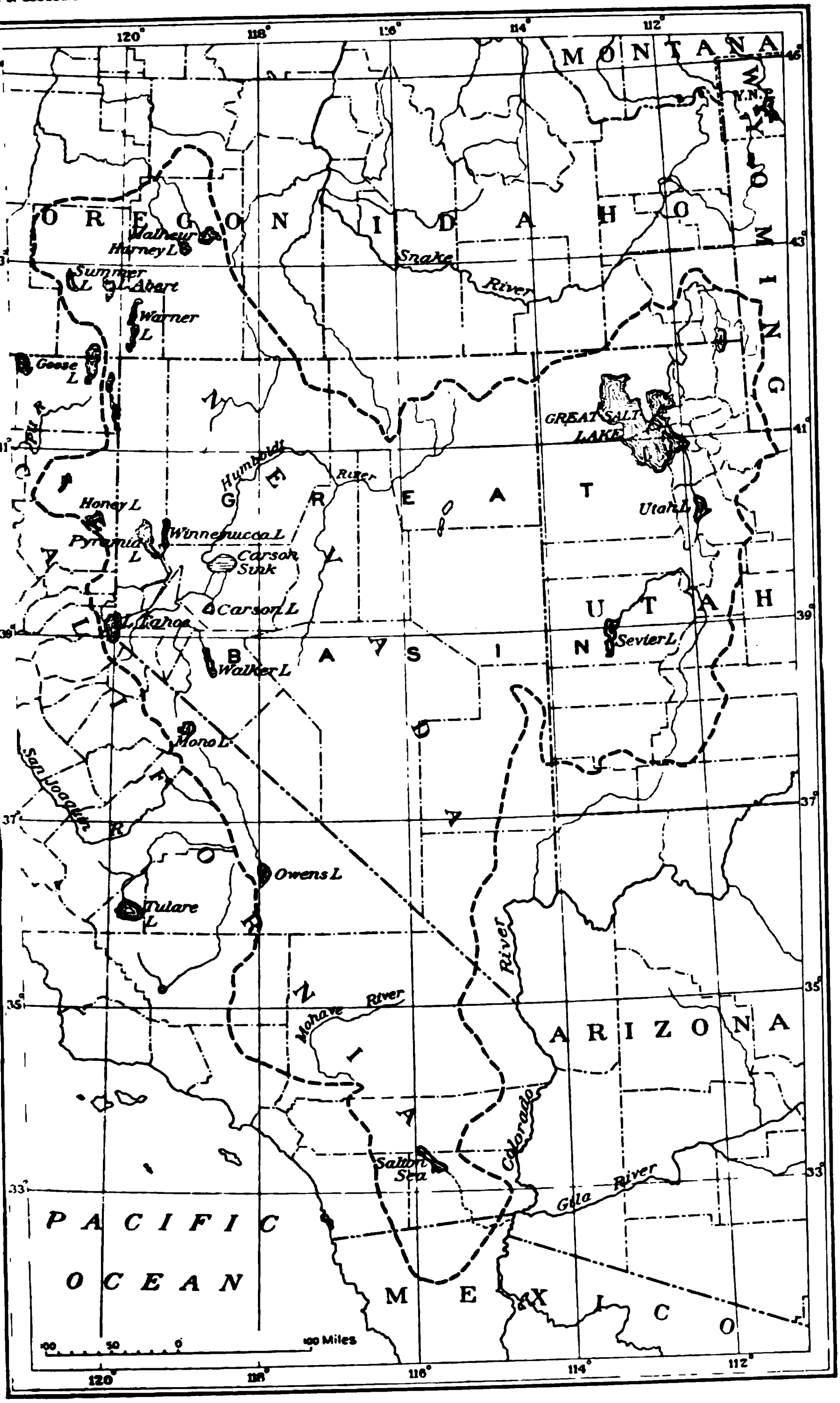


SKETCH MAP OF THE GREAT BASIN.

of the United States, and farther south high mountains constitute mucn of the boundary. The northern half of the eastern boundary is likewise high, winding through the region of the High Plateaus. The remainder of the boundary does not follow any continuous line of upland, but crosses mountain ranges and the intervening valleys without being itself marked by any conspicuous elevations. It is defined only through a study of the drainage. The general form of the area [Pl. II] is rudely triangular, with the most acute angle southward. The extreme length in a direction somewhat west of north and east of south is about 880 miles, the extreme breadth from east to west, in latitude 40° 30′, is 572 miles, and the total area is approximately 210,000 square miles. Of political divisions it includes nearly the whole of Nevada, the western half of Utah, a strip along the eastern border of California and a large area in the southern part of the State, another large area in southeastern Oregon, and smaller portions of southeastern Idaho and southwestern Wyoming. The southern apex extends into the territory of Mexico at the head of the peninsula of Lower California.

The region is occupied by a number of mountain ridges which betray system by their parallelism and by their agreement in a peculiar structure. Their general trend is northerly, inclining eastward in the northern part of the basin and westward at the south. The individual ridges are usually not of great length, and they are so disposed en échelon that the traveler winding among them may traverse the basin from east to west without crossing a mountain pass. The type of structure is that of the faulted monocline, in which the mountain ridge is produced by the uptilting of an orogenic block from one side of a line of fracture, and it has been named (from the region) the Basin Range type. Its distribution, however, does not coincide perfectly with the district of interior drainage. On the one hand the Great Basin includes along its eastern margin a portion of the Plateau province, with its peculiar structural type, and on the other the Basin Range province extends southward through Arizona to New Mexico and Mexico.

Between the ranges are smooth valleys, whose alluvial slopes and floors are built of the débris washed through many ages from the mountains. In general they are troughlike, but in places they coalesce and assume the character of plains. The plains occupy in general the less elevated regions, where an exceptional amount of detritus has been accumulated. In local terminology they are called deserts. The largest are the Great Salt Lake and Carson deserts at the north and the Mojave and Colorado deserts at the south. The Escalante, the Sevier, the Amargosa, and the Ralston are of subordinate importance.

Where the basin is broadest, the general elevation of its lowlands is about 5,000 feet, but they are somewhat higher midway between the eastern and western margins, so as to separate two areas of relative depression, the eastern marked by the Great Salt Lake and Sevier deserts, and the western by the Carson Desert. Southward there is a gradual and irregular descent to about sea level, and limited areas in Death Valley and Coahuila Valley lie lower than the surface of the ocean.

The aridity of the region is shown instrumentally by the records of rainfall and atmospheric humidity. On the broad plain bounded east and west by the Appalachian Mountains and the Mississippi River, 43 inches of rain fall in a year. On the lowlands of the Great Basin there fall but 7 inches. In the former region the average moisture content of the air is 69 per cent of that necessary for saturation; in the lowlands of the Great Basin it is 45 per cent.[1] From the surface of Lake Michigan evaporation removes each year a layer of water 22 inches deep.[2] The writer has estimated that

[1] These figures and those in the preceding sentences are based on data compiled by the United States Signal Service. Through the courtesy of Gen. A. W. Greely, Chief Signal Officer, the writer has had access to manuscript as well as printed data.

[2] D. Farrand Henry, in a report on the meteorology of the Laurentian lakes (Rept. Chief Eng. for 1868, Washington, 1869, p. 980).

[illegible]

[illegible] there are numerous lakes [illegible] some of moderate size. [illegible] the Humboldt Range [illegible] the mountains are whitened every winter by snow [illegible] is absorbed by [illegible] without suffering in drainage ways. [illegible] springs, and of the mountain [illegible] succumbing to the ravenous [illegible] fairly entitled to the name of river, dwindles [illegible] 200 miles is able to sustain an evaporation [illegible] of the small streams are without [illegible] lowest point a playa or alkali flat—a [illegible] perhaps of salt, over which a few inches of water [illegible]

[illegible] there are no lakes dependent for their water on the [illegible] most southerly lake is Sevier, in latitude 39°; the last [illegible] between the thirty-sixth and thirty- [illegible] 200 miles evaporation is supreme. Playas abound. [illegible] and springs are rare. Death Valley, with its floor of salt [illegible] is overlooked on either side by mountains [illegible] yield it no flowing stream, and more than one [illegible] while endeavoring to pass from spring to spring. [illegible] 100 miles long, but it preserves its life only by concealment.

[illegible] J. W. Powell, 2d ed., Washington, 1879, p. 73.
[illegible] Chief Signal Officer.

creeping through the gravel of the desert and betraying its existence only where ledges of rock athwart its course force it to the surface.

As in other desert regions, precipitation here result only from cyclonic disturbance, either broad or local, is extremely irregular, and is often violent. Sooner or later the "cloud-burst" visits every tract, and when it comes the local drainage way discharges in a few hours more water than is yielded to it by ordinary precipitation for many years. The deluge scours out a channel which is far too deep and broad for ordinary needs and which centuries may not suffice to efface. The abundance of these trenches, in various stages of obliteration but all manifestly unsuited to the every-day conditions of the country, has naturally led many to believe that an age of excessive rainfall has but just ceased—an opinion not rarely advanced by travelers in other arid regions. So far as may be judged from the size of the channels draining small catchment basins, the rare, brief, paroxysmal precipitation of the desert is at least equal while it lasts to the rainfall of the fertile plain.

A line of cottonwoods marks the course of each living stream, but otherwise the lowlands are treeless. So are most of the alluvial foot slopes and some of the smaller mountains, especially at the south. Except on the high plateau in central Utah there is little that may be called forest. The greater mountains have much timber in their recesses, but are not clothed with trees. The growth is so irregular and interrupted that the idea of a tree limit could not have originated here, but it may be said that only the straggling bushlike cedar passes below 6,000 feet at the north or 7,000 feet at the south. Only conifers are of such size and abundance as to have economic importance. Oak and maple grow commonly as bushes, forming low thickets, but occasionally rank as small trees, along with the rarer box elder, ash, locust, and hack berry. The characteristic covering of the lowlands is a sparse growth of low bushes, between which the earth is bare, excepting scattered tufts of grass. Toward the north, and especially on the higher plains, the grass is naturally more abundant and the bushes occupy less space, but the introduction of domestic herds favors the ascendancy of the bushes. At the south the bushes are partly of different species, and they are partially replaced by cactuses and other thorny plants. The playas are bare of all vegetation and are usually margined by a growth of salt-loving shrubs and grasses. A single southern bush bears leaves of deep green, but with this exception the desert plants are gray, like the desert soil. These, and the persistent haze whose gray veil deadens all the landscape, weary the eye with their monotony, so that the vivid green marking the distant spring is welcome for its own as well as for the promise of refreshment to the thirsty traveler.

The causes of this arid climate lie in the general circulation of the atmosphere, in the currents of the Pacific Ocean, and in the configuration of the land. There is a slow aerial drift from west to east, so that the air coming to the basin has previously traversed a portion of the Pacific, to which its temperature and humidity have become adjusted. Off the west coast of the United States there is a southward current believed to be the chief branch of the Kuro Siwa. Prof. George Davidson [1] estimates its width at about 300 miles, and finds that its temperature rises with southward advance only 1° F. for each degree of latitude. Being derived from a north-moving current, it reaches our coast with a temperature higher than that normal to the latitude, while at the south its temperature is below the normal. As pointed out by Dutton,[2] the air passing from it to the land at the north is cooled by the land and precipitates moisture, while the similar air current at the south is warmed by the land and converted to a drying wind. The Great Basin falls within the influence of the drying wind, its southern part being more affected than its northern. At the extreme south and the extreme north the mountains between the ocean and the basin do not greatly inter-

[1] Letter to the writer.

[2] Dutton, C. E., Cause of the arid climate of the western portion of the United States: Am. Jour. Sci., 3d ser., vol. 22, p. 249.

## [illegible] LAKES IN CALIFORNIA AND NEVADA

### [illegible] LAKE BASIN

[illegible]

lished account of the bifurcation of Truckee River so as to supply two lakes is given by King,[1] who says:

At the time of our first visit to this region, in 1867, the river bifurcated; one half flowed into Pyramid Lake, and the other through a river 4 or 5 miles long into Winnemucca Lake. At that time the level of Pyramid Lake was 3,890 feet above the sea, and of Winnemucca about 80 feet lower. Later, owing to the disturbance of the balance between influx and evaporation already alluded to as expressing itself in Utah by the rise and expansion of Great Salt Lake, the basin of Pyramid Lake was filled up, and a backwater overflowed the former region of bifurcation, so that now the surplus waters go down the channel into Winnemucca Lake, and that basin is rapidly filling.

Between 1867, the time of my first visit, and 1871, the time of my last visit, the area of Winnemucca Lake had nearly doubled, and it has risen from its old altitude about 22 feet, Pyramid Lake in the same time having been raised about 9 feet. The outlines as given upon our topographical maps are according to the survey of 1867, and form interesting data for future comparison.

The differences in elevation between Pyramid and Winnemucca lakes as reported by King and determined by Russell in 1882 are as follows: In 1867 Pyramid was 80 feet higher than Winnemucca; in 1872 Pyramid was 67 feet higher than Winnemucca; in 1882 Pyramid was 12 feet higher than Winnemucca, as determined by engineer's level; in 1890, when the region was surveyed by the topographers of the United States Geological Survey, Pyramid was but 5 feet higher than Winnemucca. The waters of both lakes are alkaline and brackish. Their shores, like those of all the lakes in the lower portion of the Great Basin, are clothed only with scanty growths of desert vegetation.

In the southern part of Pyramid Lake the water is slightly discolored by multitudes of shining particles that are rendered visible when a ray of light is passed through it. The lack of transparency is apparently due to the suspended silt brought down by Truckee River. In the northern part of the lake the water is wonderfully clear, and at some distance from the land is deep blue in color.

The largest islands in Pyramid Lake are Pyramid and Anaho, which rise in its southern part near the eastern shore. Anaho Island rises 520 feet above the water level of 1890, and is surrounded by water 150 to 300 feet deep. Pyramid Island rises 320 feet above the water level of 1890 and the water near its base is 150 to 175 feet deep.

## TRUCKEE RIVER BASIN.

The Truckee River system comprises the main river and several minor tributaries, all having as their chief sources of supply small mountain lakes. Truckee River itself is the natural outlet of Lake Tahoe, a beautiful mountain lake, 193 square miles in area, lying at an elevation of more than 6,000 feet above sea, and noted as the largest body of fresh water in the United States at so high an altitude. Nearly three-fourths of the lake is in California and the rest is in Nevada.

[1] U. S. Geol. Expl. 40th Par., vol. 1, 1878, pp. 505-506.

[illegible] Lake Tahoe the Truckee flows [illegible] where it turns to the [illegible] again turns north and [illegible] from Lake Tahoe [illegible] country is heavily timbered [illegible] alternate with small [illegible] Truckee Valley, and [illegible] productive soil. [illegible] its total fall is about [illegible]

[illegible] Lake [illegible] is the [illegible] enters at the town [illegible] and the natural outlet [illegible] of Truckee [illegible] an independent [illegible] along Lake [illegible] above sea level, and [illegible] building [illegible] is timber forested [illegible] snowfall. During [illegible] almost [illegible]

[illegible] Truckee—the [illegible] emergency [illegible] capacity of about [illegible] the [illegible]

[illegible]

[illegible]

Carson River on the south. The drainage line from Humboldt Lake to the sink was marked as an intermittent river.

Carson River is formed by its East [1] and West forks, which rise in the extreme eastern part of California and flow northeastward to their union near the town of Gardnerville, Nev. From this point the river flows northward to Empire, Nev., where it turns to the east and finally disappears into Carson Sink. It is about 160 miles long to the head of the East Fork, and its total fall is about 6,400 feet. The fall of the East Fork above the junction is 5,500 feet, and the fall of the main stream in the 108 miles below the junction is about 900 feet. Between Empire and Dayton the river occupies a deep, rugged canyon.

The principal tributaries of the East Carson are Silver King, Wolf, Silver, Markleeville, and Leviathan creeks. These streams drain a rough, mountainous country, ranging in altitude from 5,000 to 11,000 feet above sea level. Good storage sites exist on all the important tributaries. The reservoir sites in Pleasant Valley and on Silver Creek have been partly developed.

The area drained by the West Carson is not so large as that of the East Carson and its altitudes are, in general, lower. By constructing a reservoir at Hope Valley a large amount of power may be developed in the West Carson Canyon.

The soil throughout the Carson and Dayton valleys is very porous and its irrigation requires a large amount of water. The low-water flow is sufficient to reclaim only a small portion of the land. The irrigated acreage may, however, be greatly increased by constructing reservoirs on the headwaters to store the spring floods.

## WALKER LAKE BASIN.

Walker Lake, which next to Pyramid Lake is the most picturesque and attractive of the desert lakes of Nevada, lies in the northern part of Esmeralda County. It is supplied entirely by Walker River, which enters at its north end.

As one of the lakes of the region occupied by glacial Lake Lahontan, it was described by Russell [2] as follows:

> The lake is 25.6 miles in its longer, or north and south axis, and has an average width of between 4.5 and 5 miles. Its area is 95 square miles. * * * Over a large area in the central and western portions it has a remarkably uniform depth of 24 feet; but as a rule the depth increases as one approaches the western shore, which is overshadowed by rugged mountains. The bottom throughout the central portions is composed of fine tenacious mud, which in many places is black in color and has the odor of hydrogen sulphide. Coarser deposits, consisting of sand and gravel, mingled with the empty shells of Pyrgula and Pompholoyx, etc., were found only in the immediate neighborhood of the shore. * * *

[1] Called East Carson River above mouth of Markleeville Creek.

[2] Russell, I. C., Geological history of Lake Lahontan, a Quaternary lake of northwestern Nevada: Mon. U. S. Geol. Survey, vol. 11, 1885, pp. 69-70.

[illegible]

the Sierra, coincides for 36 miles with the western margin of the Great Basin.

The lake is 6,412 feet above the sea.[1] The lowest pass in the serrate mountain crest along its western border is 3,000 feet above its surface. The highest peaks that overshadow it rise more than 6,000 feet above the level of the lake. The eastern portion of the basin partakes of the character of the arid interior region, and includes valleys covered with sagebrush and rugged mountain slopes, but scantily clothed with cedar and piñon. Over this portion no running water can be found during the greater part of the year. That it is not really a desert is shown by the fact that among the clumps of sagebrush it produces nutritious bunch grass in sufficient abundance to afford pasturage for a few cattle and horses.

The southwestern border of the basin includes magnificent mountains that are clothed in favored places with forests of pine. The highest peaks reach far above the timber line and bear a varied and beautiful alpine flora.

The lake derives its principal water supply from the creeks that descend the eastern slope of the Sierra and empty into it from the south and west. The surface drainage is supplemented by a number of springs, some of which are of considerable size.

The creeks tributary to Lake Mono are clear and flow through channels excavated for the most part in granite and metamorphosed sediments, but near their mouths they have eroded small gorges through material deposited during previous high-water stages of the lake. No chemical analyses of these waters have been made, but they undoubtedly hold a small percentage of mineral matter in solution, which is left when evaporation takes place.

Most of the springs of the basin are either in the bottom of the lake or near its shores, and they are most numerous near the base of the mountains, which lie close to the western shore. Only three of those that rise on the land have a temperature noticeably above the normal. The character of most of those rising in the bottom of the lake is uncertain. Some of them reveal their presence in cold weather by vapor, seen on the lake surface above them, and are thus known to be thermal. None of the springs of the basin are highly charged with mineral matter; on the contrary, some of the more copious are remarkable for their purity.

## OWENS LAKE BASIN.

Owens Lake is a body of saline water in the central part of Inyo County, covering about 75 square miles. Like Mono Lake, which lies 125 miles farther north and about 3,000 feet higher, it derives its water from the vicinity of Mount Lyell.

[1] Mount Lyell sheet, Topog. Atlas U. S., U. S. Geol. Survey; edition of May, 1901; reprinted February, 1910, with additions.

[illegible]

[illegible] canyon into Owens [illegible]
[illegible] summit of Mount Whitney [illegible]
[illegible] above the [illegible]
[illegible] valley.

[illegible] comparatively narrow and [illegible]
[illegible] east side mountain [illegible]
[illegible] miles wide, and a west-side [illegible]
[illegible] west-side area [illegible]
[illegible] mountain slope [illegible]
[illegible] composed of delta-fan surfaces [illegible]
[illegible] at the foot of the mountains [illegible]
[illegible] at the south end [illegible]
[illegible] east-side range [illegible]
[illegible] valley floor. [illegible]
[illegible] alluvium of considerable [illegible]
[illegible] feet at the western [illegible]
[illegible] mountains. [illegible]
[illegible] eastern slope [illegible]
[illegible] in altitude from [illegible]
[illegible] feet at the crest. [illegible]

[illegible] eastern slope is practically [illegible]
[illegible] is a scanty [illegible]
[illegible] covering [illegible]
[illegible] watercourses. [illegible]
[illegible] slope, [illegible]
[illegible] trees.

[illegible]

Symmes creeks, opposite Kings River basin, and Sawmill, Bairs (Moffett), George, Hogback, Lone Pine, Tuttle, [illegible], Cottonwood, and Ash creeks, opposite Kern River basin. No drainage enters Owens River from the east except during the rare exceptionally heavy rainstorms.

Nearly all the streams rise in glacial lakelets and marshes which lie near the crest of the Sierra and serve to a certain extent as storage reservoirs in regulating the flow.

The streams emerge from the mouths of their canyons upon the porous alluvial plain at the base of the Sierra, which is [illegible] to [illegible] miles in width and several hundred feet deep, and across which they flow to the Owens River channel in the trough of the valley. This belt of débris is the source of a large and important loss, part of which appears in numerous springs throughout the valley. Perhaps stronger evidence of the great loss by seepage is afforded by the broad belt of wet and somewhat boggy land which extends over a large part of the trough of the basin. Undoubtedly large quantities of water can be obtained by sinking wells within this area. Several artesian wells which have been sunk in the vicinity of Independence yield a strong flow and give convincing evidence of an artesian belt in the valley. With a view to the greatest ultimate utilization of the valley's water supply, the city of Los Angeles is conducting special investigations to determine the depth to and fluctuations in the ground-water plane and the rate of evaporation from free water surface and saturated gravels near Independence;[1] also to determine the amount of precipitation on the alluvial plain at the base of the Sierra between the 4,000 and 6,000 foot contours and the seepage losses of creeks crossing it.

Owens Valley is extensively cultivated and particularly adapted to stock raising. Numerous diversions are made for irrigation at different points on Owens River and tributaries, particularly in the upper part of the valley. Considerable water is also used for irrigating meadow lands in Long Valley north of Owens River canyon, but it is returned to the river above the head of Owens Valley.

The basin affords many opportunities for power development. The fall of the stream is so great and its minimum flow is so large and so reliably constant that it would develop many thousands of horsepower.

## MOHAVE RIVER BASIN.

Mohave River rises in San Bernardino County, Cal., on the northern slope of the Sierra Madre, its headwaters flowing from elevations 5,000 to 8,000 feet above sea level. It takes a circuitous course, winding successively to the west, north, and east, decreases in volume

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[1] See Water-Supply Paper U. S. Geol. Survey No. 294, 1912.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

of the waters which reach the lowlands. Some of the streams flowing from these higher ranges are perennial and all supply better water than the smaller streams that flow from the buttes of the desert proper. The two ranges are so high that their snow cover often remains until midsummer and maintains a continuous though gradually diminishing flow of water. On the other hand, the region is prevented by its position on the landward side of the ranges from receiving the benefit of the heavy winter precipitation and consequent heavy run-off of the more favored southern and western slopes.

In general the streams of Antelope Valley flow at right angles to the trend of the mountains in which they originate; most of these streams converge toward Oban, and thence, though their channels are less clearly defined, sweep toward the northeast and empty into Rosamond Dry Lake, or its extensions, Buckhorn and Rogers dry lakes.

None of the streams in the valley are large, and only a few are worthy of mention. Those of the northern slope of the San Gabriel Range and the southeast slope of the Tehachapi are all short, with the exception of a few which have worked their way back far enough into the ranges to become important as water carriers. Of these, Rock, Little Rock, and Amargosa creeks are the more important.

The main fork of Rock Creek rises in the rugged region north of North Baldy, at an elevation of 6,500 feet above sea level, and the uppermost tributaries of its south branch, which drains the region immediately north of Mount Islip, head at an elevation of [illegible] feet. The creek flows northwestward past [illegible] to the northwest corner of T. 4 N., R. 9 W., where it turns northward to the gravelly margin of Antelope Valley. Here it breaks into several distributaries which diverge from the apex of the alluvial fan built up by the stream itself. The more or less constant flow of Rock Creek is utilized by irrigation canals that extend for some distance east and west from the mouth of the canyon.

Little Rock Creek, which rises in the high granite mountain country in T. 3 N., R. 10 W., flows northwestward and enters Antelope Valley near Little Rock, in the northeast quarter of [illegible]. The channel of this creek in Antelope Valley is better preserved than that of any of the other streams, and it is traceable almost to the vicinity of C. N. Reid's ranch, nearly 7 miles east of Lancaster. There, however, the channel begins to lose its character and is not easily followed farther toward Rosamond Dry Lake. The waters of this stream are used to irrigate lands adjacent to the settlement of Little Rock.

Amargosa Creek, which enters Antelope Valley about 3 miles west of Palmdale, is the only stream with even moderate flow between Little Rock Creek and the extreme west end of Antelope Valley.

A number of streams which, though draining rather small areas, carry considerable water, rise at the west end of Antelope Valley, between

[illegible] and San Francisquito [illegible] springs. [illegible] numerous [illegible] hang [illegible] these creeks is called [illegible] measurement [illegible] of any of these springs or creeks [illegible] large spring [illegible] ranch is said [illegible]

[illegible] Cottonwood and Cottonwood creeks [illegible] that creeks each [illegible] miles [illegible] considerable water even in the summer [illegible] the drainage basin [illegible] these streams [illegible] stream water that [illegible] the Antelope Valley.

[illegible] important stream [illegible] elevation [illegible] some [illegible] miles west of [illegible] the great alluvial fan [illegible] canyon. Since this fan was [illegible] creek has been changed [illegible] that it has carved a sharp [illegible]

[illegible] intermittent in character, exist at [illegible]

[illegible] lakes—lie in depres[illegible] San Andreas fault [illegible] small area in the [illegible] Its waters remain [illegible] overflows occasion[illegible] smaller Hughes Lake, [illegible] flowing stream [illegible]

[illegible] lowest portions [illegible] flood waters [illegible] absorbed [illegible] such waters [illegible] south [illegible] margin of the [illegible] and firm [illegible] for many miles. [illegible] water [illegible] sufficiently near the [illegible] and [illegible] of alkali [illegible] minor importance occur [illegible]

## SALTON SINK.

Salton Sea originally formed a part of the Colorado Desert, which has an area of nearly 2,000 square miles and extends in a northwesterly direction almost 100 miles from the California-Mexico boundary line. It comprises two fertile valleys, one to the northwest of the sink, in Riverside County, known as the Coachella Valley, and the other to the southeast of the sink, in Imperial County, called the Imperial Valley. Salton Sea, which now partly fills the sink, lies between the two valleys and is partly in Riverside County and partly in Imperial County. The longest diameter of the sea has a northwest-southeast direction. On December 31, 1908, its surface was 206 feet below mean sea level, and it had a length of nearly 45 miles, a maximum width of about 15 miles, a minimum width of 9.5 miles, a maximum depth of 67.5 feet, and a superficial area of about 443 square miles. It is about 160 miles southeast of Los Angeles, 90 miles northwest of Yuma, and 50 miles north of Calexico.

A few thousand years ago, according to geologic evidence, what is now Salton Sea was a part of the Gulf of California, which then extended about 200 miles farther northwest than at present. It is probable that the gulf waters then swept inland to the base, or nearly to the base, of San Jacinto Peak, although all evidence which would enable their exact limits to be fixed has been obliterated by still more recent geologic events. At that time the mouth of Colorado River was in the vicinity of Yuma, 60 miles in an air line north of its present location. Presumably, then, as now, it was discharging annually enough silt to cover 1 square mile to a depth of 53 feet with dry earth, equivalent to 1 cubic mile each century, cut from the great canyons in the upper Colorado and the Gila Valley and carried to the Gulf. Running water will carry in suspension matter that quickly settles in still water, the settling process in this case being aided by the clarifying effect of the salt water.

As a result of these processes the Colorado delta was gradually extended southwestward toward the Cocopa Mountains, and when it reached them it had separated the old gulf into the present gulf and an inland sea. Delta growth, however, did not cease with the separation of the water body into two parts. Silt continued to be brought down the stream and to be deposited in its bed, along its banks, and in the still waters at its mouth. A stream, by this process of deposition along its channel, eventually builds the channel up until it is higher than the lands adjacent on either side. It is then in a condition of unstable equilibrium, and at some favorable time, as during an exceptional flood, it will break out of its immediate banks and establish itself in some more favorable course. By

this process, oft repeated, it comes eventually to flow over all parts of its delta, building up each part in succession. By such a process the Colorado must have discharged alternately into the gulf and into the depression now known as the Salton Sink, meanwhile building up the delta dam that separates them until it reached a height of about 40 feet above sea level. During this process it is highly probable that water filled the Salton depression and evaporated from it many times, for it must have quickly disappeared whenever the erratic river changed its course to the gulf, for the run-off from the mountains that surround the sink is too slight to maintain a permanent water body in this region of intense evaporation. Meanwhile the original body of salt water that occupied the sink had been displaced by the volumes of fresh water poured into it from the river, and in the intermediate stages of the lake's existence, at least, its water was fresh or nearly fresh. A clear and definite indication of the last occupancy of this depression by a lake, presumably just before the river had shifted its course that it now follows to the gulf, may be seen in the remarkably well preserved old water line that rims the desert from Indio to the Cerro Prieto at a height of 40 feet above sea level. On the rocky points that projected into the lake it is marked by a thick deposit of calcium carbonate, by slightly cut sea cliffs, and by a change in the profile of the rocky spurs at the water line. Where alluvial cones and the sandy floor of the desert formed the shore line beaches have been developed, and although of soft sand and easily eroded, they are even now well preserved, thus testifying to the recency of the action that produced them. Over the floor of the desert and along the sandy beaches are myriads of shells of fresh or brackish water mollusks [1] that lived in the lake.

There are some reasons for thinking that the lake at this latest stage was not perfectly fresh, that its waters were at least distinctly "hard." Its area when it stood at 40 feet above sea level was somewhat in excess of 2,100 square miles. The average flow of the Colorado has been determined as about 11,000,000 acre-feet per annum. The evaporation from a surface of the area of the old lake, under the conditions that prevail here, has never been determined, but is undoubtedly high. If it is as high as 8 feet per annum, it would nearly equal the average annual inflow from the Colorado; if it is but 7 feet per annum, the average inflow would exceed the evaporation by 2,000 second-feet, or somewhat less than 14 per cent of the inflow. In either event, the waters of the lake would be markedly more alkaline after a term of years than those of the Colorado. The calcium carbonate incrustations on the rocky points about the shores of the old lake are best explained by supposing that the lake

[1] Stearns, R. E. C., Remarks on fossil shells from the Colorado Desert: Am. Naturalist, vol. 13, pp. 141-154.

waters contained large quantities of this salt, so that wherever they broke in spray and evaporated more rapidly than usual, the carbonate was deposited. This necessary excess of inflow over outflow at the period of maximum area of the lake, taken in connection with the thick calcium carbonate incrustations on the shores, indicates distinctly hard water. It may be assumed that other salts than calcium carbonate were also present in large amount, for the conditions that would lead to the abundance of one salt would also lead to an abundance of the others. The shells so thickly distributed over the desert floor, however, are not salt-water forms, but are indentical with those now found living in the springs and occasional permanent streams about the desert borders. Many of these springs and streams are somewhat brackish, and the creatures flourish in them. It seems probable, then, that the lake waters also were rather alkaline, perhaps even brackish, at the time the lake attained its maximum area.

The period at which this lake disappeared can not be precisely fixed. The time units of geology are too large and too indefinite to translate satisfactorily into years, so that when we say that the disappearance of the lake is the most recent of geologic events we still leave the mind groping for a definite human standard of time. The sandy beaches which mark the borders of the ancient lake are cut away, to be sure, where washes cross them from the mountains, but in sheltered places they are still perfect. Where they stretch across an embayment from one rocky point to another they are mere embankments of sand, old barrier beaches, with depressions behind them once occupied by shallow lagoons. In other areas, where they contour the alluvial cones, they are gullied and cut away where streams have flowed across them, but in other places are preserved unscarred. At one locality noted a low sea cliff that had been cut in alluvial-fan material was still preserved, although the loose sand and bowlders would slump in a few heavy storms.

In a region of abundant rainfall such ephemeral forms as these would be more nearly obliterated within fifty years after the lake had disappeared than they are now in the desert. In such a region the precipitation is twenty times that of the desert. It is the crudest of estimates—merely a guess, in fact—to state that, reasoning from geologic evidence alone, it may be a thousand years since the lake disappeared, yet it puts in concrete form such a guess as the geologist is able to make, and this guess may be correct within a margin of error of 50 per cent.

When human records are studied some evidence on this point is found, but it is almost as uncertain as to time as that furnished by the physical features. The Indians in the Coachella Valley have distinct legends to the effect that at some time in the past the valley was occupied by a large body of water. Prof. Blake records that

. nna. The river receives few

· rom the Colorado at a point
—— irrigate land in the Imperial

## DRAINAGE BASINS.

### FEATURES.

—— basins include all streams south
— the western slope of the Coast
directly or indirectly. The
channel is nearly 50 miles and the
low-water flow of the streams
many of them all the water dis-
below the canyons. In the
torrential and discharge large
Barbara the general course of
of Santa Barbara, however,
intersection of the Coast Range
direction is southwestward

### RIVER BASIN.

the Pacific Ocean below San Diego
its principal tributary, Cotton-
untains of the Coast Range, and
miles, where it is joined by Pine
flows southwestward 12 miles
the Mexican boundary, about
total drainage area of Cotton-
Juana River is approximately
the Sweetwater and Otay River
in San Diego County. Pine

throughout, although it
exceeding 3,000 feet; below
narrow canyon, broken
comparatively light
Altitudes range from
empties into Tia Juana

The timber con-
which are confined
the stream and to the higher
well covered with brush.

The mean annual rainfall ranges from [illegible] inches along the foot-hills and from 20 to 30 inches in the mountains.

The basin affords several good reservoir sites. The Barrett reservoir, located at the junction of Pine Valley Creek at an elevation of 1,500 feet; the Morena reservoir on Cottonwood Creek, at the lower end of Morena Valley, 8 miles above the Barrett reservoir, and Pine Valley reservoir on Pine Valley Creek, at the west end of Pine Valley. The Morena and Pine Valley reservoirs are at an elevation of [illegible] feet. All of these sites have been surveyed. The Morena dam is now constructed and considerable preliminary work has been done at the Barrett dam, including the building of a low concrete dam to a height of about 20 feet above the bed of the stream. A conduit has been constructed to divert water from Cottonwood and Pine Valley creeks from above the Barrett dam to the lower Otay reservoir in the Otay River basin. This conduit has a capacity of about 60 second-feet, and will divert all the water from these creeks when their combined discharge does not exceed that amount. The city of San Diego receives its water supply from the lower Otay reservoir.

## SWEETWATER RIVER BASIN.

Sweetwater River rises in the south and east slope of the Cuyamaca Mountains of the Coast Range, flows nearly due south for a distance of 15 miles, then turns to the west and southwest and discharges into San Diego Bay south of National City. Its length is 45 miles and its area comprises approximately 215 square miles, the greater part of which is in mountainous country. The basin is extremely narrow. It lies directly south of San Diego River and north of the Otay and Cottonwood Creek basins.

The topography is not so rough as that of San Diego River basin, although the mountains and foothills extend within 3 or 4 miles of the shore line of San Diego Bay, and the valley and mesa lands are not so extensive as along San Diego River. The basin is poorly forested. The timber is confined almost entirely to the immediate valleys of the streams and to the higher mountain areas. The mountain slopes have a fairly good covering of brush, but the lower foot-hills are almost bare, supporting only a sparse growth of low brush.

The mean annual rainfall ranges from 10 to 15 inches along the foot-hill belt and from 20 to 40 inches in the mountains.

A considerable area lying between San Diego Bay and the foothills south from National City to the Mexican boundary is under a high state of cultivation. The greater part of this land is irrigated by water taken from Sweetwater River.

The celebrated Sweetwater dam is located on Sweetwater River about 8 miles above its mouth at an elevation of 145 feet. There are two other reservoir sites on Sweetwater River, one a short distance

[illegible] below Descanso, at [illegible]

[illegible] 1904 there were [illegible] the reservoir [illegible] over this period [illegible] in the reser[illegible] of which water was delivered [illegible] operations were also exten[illegible] the river below the reservoir [illegible] additional storage reservoir [illegible] would serve to tide over an extended [illegible]

## [illegible] RIVER BASIN

[illegible] Cuyamaca Mountains on the wester[illegible] in a southwesterly direction [illegible] False Bay, at the norther[illegible] Its length is about 50 miles, half [illegible] above the town of Lakeside. The Sa[illegible] south of the Santa Ysabel basin and north [illegible]

[illegible] several small tributaries, the most importa[illegible] South Fork, and Chocolate creek [illegible] east and south above Lakeside. Sa[illegible] important tributary from the north, ente[illegible]

[illegible] basin above Lakeside, is extremely roug[illegible] numerous valleys and high me[illegible] Elevations throughout the basin rang[illegible] foothills and from 600 to 6,000 feet in t[illegible] Peak, the highest point in the basin, [illegible]

[illegible] very poorly forested. The timber is co[illegible] valley along the streams and to t[illegible] The mountain slopes have a fairly go[illegible] but the lower foothills are almost entirely bar[illegible] growth of low brush.

[illegible] rainfall ranges from 10 to 15 inches along t[illegible] from 20 to 40 inches in the mountains.

[illegible] extensively in the valleys and on the me[illegible] Lakeside and San Diego, and additional areas mig[illegible] adequate supply of water could be assured. Tw[illegible] have been constructed: The Cuyamaca reservo[illegible] Boulder Creek, at an elevation of 4,600 feet above s[illegible] capacity of 11,400 acre-feet with a 41½-foot earthe[illegible]

dam. La Mesa reservoir is located [illegible] northwest of the town of La Mesa, at an [illegible] feet. The dam is of earth and rock, is 66 feet high, and has a storage capacity of about 1,500 acre-feet. La Mesa reservoir [illegible] from San Diego River during the winter.

## SAN DIEGUITO RIVER BASIN.[1]

San Dieguito River, or Santa Ysabel Creek, as it is called from its source to the San Pasqual Valley, rises in the [illegible] on the western slope of the Coast Range and flows westward through San Pasqual Valley, below which it takes its true name, and empties into the Pacific Ocean midway between [illegible] and San Diego. Its length is 50 miles, and the maximum width of the drainage basin is about 15 miles. The total drainage area is approximately [illegible] square miles. It lies south of San Luis Rey River and north of the San Diego River basin.

Numerous small tributaries enter Santa Ysabel Creek between its source and San Pasqual Valley, the most important being [illegible] Canyon and Temescal creeks from the north and Santa Maria Creek from the south. Above San Pasqual Valley the creek maintains a light flow throughout the year, but below that point the channel is dry during the summer months.

The upper part of the basin is rough, the surface being cut by many canyons. The lower part in the foothills is more rolling, with large areas of valley and high mesa land. The formation is a [illegible] granite. The basin has very little timber, the principal cover being brush, grass, and a few scattered oaks.

The mean annual rainfall ranges from [illegible] to [illegible] inches along the foothills and from 20 to 40 inches in the mountains.

No important amount of irrigation is carried on in this basin. A diversion is made in San Pasqual Valley to irrigate a small area along the river. A good storage reservoir site exists on the main stream at Pamo Valley, below the junction of Temescal Creek with the Santa Ysabel.

No great amount of water power can be developed in this basin.

## SAN LUIS REY RIVER BASIN.

San Luis Rey River drains an area of about 575 square miles, lying wholly in the northern part of San Diego County and extending from the crest of the Coast Range to the Pacific Ocean, a distance of 65 miles, with a maximum width of about 16 miles.

The river is formed by many small streams, which have their sources in the higher elevations of the Coast Range and come together at the lower or west end of what is known as Warner's Valley. Below

[1] Called Bernardo River in Water-Supply Paper 271 and previous reports.

this point the river flows for 10 miles through a deep, narrow canyon with a heavy grade, then over a sandy and gravelly bed with light grade for some 40 miles, finally discharging into the Pacific Ocean at Oceanside.

Altitudes within this basin range from 50 to 500 feet in the foothills in the vicinity of Oceanside and from 500 to 6,000 feet on the mountains. Palomar Mountain, the highest peak in the basin, has an elevation of 6,126 feet above sea level. The upper portion of the basin is more or less rolling, and several of the valleys are under cultivation and are used extensively for stock raising; the middle part, occupied by the river in its canyon, is rough; on the lower reaches the surface becomes less rugged, merging into the foothills, which extend to the coast. The rocks are granitic.

The basin is poorly forested. Some fairly good timber is found on the higher elevations, but the greater part of the cover is brush and grass with a scattered growth of oaks.

The mean annual precipitation in this basin probably ranges from 10 to 40 inches, gradually increasing with altitude. It occurs almost entirely as rain, snow appearing only occasionally on the high elevations.

Small areas are irrigated along the river, and water is diverted and used for irrigation and municipal supply at Escondido and vicinity. At the head of the rough canyon at the lower end of Warner's Valley is a good reservoir site. A dam constructed at this point would probably store the entire normal flow of the river.

The stream affords little opportunity for power development.

## SANTA MARGARITA RIVER BASIN.

Temecula Creek, as Santa Margarita River is known at its beginning, rises on the western slope of the San Jacinto Mountains in the northwestern part of San Diego County just north of the San Luis Rey drainage basin, flows north into Riverside County, then west about 15 miles to Temecula, where it flows southwest through Temecula Canyon into San Diego County and empties into the Pacific Ocean as Santa Margarita River. The highest elevation in the basin is about 5,500 feet on the divide between Temecula and San Luis Rey. Temecula Creek has few tributaries, and the topography is rather broken, though there are several small valleys in the upper reaches. The rock formation through which it flows is a loose granite with good soil covering, and there is considerable growth of small, scrubby timber. The annual precipitation ranges from 10 to 30 inches and occurs almost entirely as rain. The discharge is heavy in the spring during the flood season, but is small during the rest of the year.

## SANTA ANA RIVER BASIN.

Of the three important streams—Santa Ana, San Gabriel, and Los Angeles rivers—that traverse the valley of southern California, the Santa Ana is the largest. Its drainage basin, lying south of the San Bernardino Mountains and the Sierra Madre and taking waters from their southern slopes, is the most eastern and comprises by far the largest area, including the northern part of Orange County, the northwestern part of Riverside County, and the southwestern part of San Bernardino County. Of the total drainage area, comprising between 1,800 and 1,900 square miles, about two-thirds are in the valley, but only a few hundred yield much run-off.

The Santa Ana rises in the heart of the San Bernardino Mountains, about 30 miles east of Highland, and flows westward for about 25 miles to the mouth of its upper canyon; thence southwestward across San Bernardino Valley, through the lower canyon in the Santa Ana Mountains, and across the Coastal Plain to the Pacific Ocean at Newport Beach. Although the course of the stream measures about 100 miles, there is continuous surface flow from mountain to sea only during winter floods.

Many small streams from the southern slope of the San Bernardino Mountains and a few from the Sierra Madre west of the Cajon Pass flow toward the Santa Ana, but some of these discharge water to the main stream only in the flood seasons, the ordinary flow either being diverted or sinking into the sand and gravel of San Bernardino Valley. The principal tributaries are Bear, Alder, Mill, Lytle, and Chino creeks.

Altitudes in the Santa Ana drainage area range from a few feet above sea level on the Coastal Plain to 2,000 or 3,000 feet on the Santa Ana Mountains, 500 to 1,200 feet in the San Bernardino basin, and 2,000 to 11,000 feet on the southern slope of the San Bernardino Mountains. The more elevated regions are rough and rugged, and the mountain sides are incised by many canyons which are the result of active stream erosion. The rocks are granitic. The mesa and valley lands at the base of the mountains are composed of granitic gravel and sand of great depth. The higher mountain slopes support considerable timber; the lower slopes are as a rule covered with brush and grass.

The mean annual precipitation varies considerably in different parts of the Santa Ana basin. On the Coastal Plain west of the Santa Ana Range it averages 10 inches or more; eastward, in the San Bernardino Valley, it amounts to 10 to 16 inches. On the mountain slopes it ranges from 20 inches at the base to 40 inches or more near the crest, and in Bear Valley north of the highest peaks, such as San Bernardino and San Gorgonio, it may be even 50 inches. Considerable snow falls in the region of these high peaks in winter

and remains well into the summer, especially on the northern slopes from which the headwaters of the Santa Ana come.

Irrigation in the valleys of the Santa Ana basin has attained a very high state of development. Probably no other stream of its size in the United States is made to serve greater or more varied uses. To begin with, a portion of the flow is regulated by artificial storage in the upper part of the basin, and the water passes successively through three hydroelectric plants before reaching the mouth of the canyon. On leaving the lower plant it is turned into high-level canals and used for municipal supply and irrigation about Redlands and Highland. The irrigation water that escapes through seepage to the body of ground water is recovered from springs and flowing wells, and from pumped wells, and is used for irrigation around San Bernardino and Riverside, the power for pumping being generated on the upper reaches of the stream. Bedrock obstructions at Riverside Narrows, below the city of Riverside, force to the surface a part of the water in the gravel bed of the stream above this point, and this water, after being diverted for power development, is returned to the river above Corona. Only a few miles below it is again diverted and used for irrigation on the Coastal Plain in the vicinity of Santa Ana and Anaheim. The seepage water from irrigation is once more recovered by numerous pumping plants and flowing wells on the lower Coastal Plain west of Santa Ana. It is thus evident that the same water, in passing from mountain to sea, a distance of not more than 100 miles, may be used at least eight times for power and irrigation. In like manner the water in many of the tributaries may be used several times before reaching the main stream.

## SAN GABRIEL RIVER BASIN.

San Gabriel River is one of the three most important streams traversing the valley of southern California. Its drainage basin lies wholly in Los Angeles County west of the Santa Ana basin and east of the Los Angeles basin, and stretches from the crest of the Sierra Madre to the Pacific, a distance of about 50 miles. Its total drainage area is approximately 700 square miles, about one-third of which consists of mountain slopes, which contribute practically all of the run-off except in heavy storms. The remaining two-thirds is embraced in the San Gabriel Valley at the base of the mountains and in the Coastal Plain southeast of the city of Los Angeles.

The mountainous part of the basin is somewhat rectangular in shape. Its length east and west is about 25 miles and its width about 10 miles. It lies on the southern slope of the Sierra Madre, opposite the basins of Big and Little Rock creeks, at the north and on the southern slope of the San Gabriel Range, through which the river breaks near Azusa and enters the San Gabriel Valley.

The main stream is formed by the junction of two principal forks, one from the north and east and the other from the west. Each of the branches receives many tributaries from the crests of the surrounding ranges. The headwaters come from the western slope of San Antonio Peak (Old Baldy), altitude 10,080 feet, and from the southern slope of other high peaks at the north, such as North Baldy and Islip mountains. The west fork drains the northern slope of Mount Wilson, the eastern and northern slopes of San Gabriel Peak, and a portion of the southern slopes of the main range to the north. It joins the main stream about 8 miles above the mouth of the canyon. The general course of the stream is southwestward. After leaving the mountains it traverses San Gabriel Valley in a wide wash of sand, gravel, and bowlders, then breaks through the range of foothills separating San Gabriel Valley from the Coastal Plain at a point called The Narrows, about 5 miles northwest of Whittier, and enters the Coastal Plain, across which it flows to its mouth in Alamitos Bay, a few miles east of Long Beach. The total length of the stream is about 65 or 70 miles.

The principal tributaries of San Gabriel River are Fish Fork and Cattle Creek from the east and Iron and West forks from the west.

Altitudes in San Gabriel basin range from 20 to 200 feet on the Coastal Plain, from 200 to 900 feet in San Gabriel Valley, and from 1,000 to 10,000 feet in the mountains. The range of foothills near Whittier has an altitude of about 1,250 feet. The topography is rough and rugged in the mountains, especially in the upper part, where deep and narrow canyons exist. The geologic formation is granitic, with a light soil covering. The San Gabriel Valley is more or less rolling and is composed of granitic wash from the mountains.

The basin is rather poorly forested, having a sparse timber growth on the higher slopes and brush and some scattering timber on the middle and lower elevations.

The mean annual precipitation in this basin varies from 15 to 20 inches in the valley area and from 20 to 40 inches in the mountains. It occurs almost entirely as rain except on the higher peaks, where snow falls during the winter. On the northern slopes snow remains for several months.

The total summer flow of the stream is used for irrigation, and the same water may be put to use several times in its journey from mountain to sea. About 5 miles above the mouth of the canyon a power canal, with a capacity of 80 second-feet, takes water from the left bank of the stream and delivers it to irrigation canals below the wheels near the mouth of the canyon for irrigation in San Gabriel Valley. Some other small diversions are made in the spring months at and below the mouth of the canyon for the same purpose. Most of the excess water issuing from the canyon sinks into the sands and

[illegible]

## LOS ANGELES RIVER BASIN

[illegible] ... the Los Angeles Valley ... [illegible] ... Long Beach.

[illegible] ... the entire flow of Los Angeles River ... [illegible] ... above Los Angeles for the ... [illegible] ... amount of water passing this point ... [illegible]

[illegible] ... Arroyo Seco, which ... [illegible] ... miles of the Sierra Madre. This ... [illegible] ... on the west side of Pasadena ... [illegible] ... known as ... [illegible] ... miles long, composed of ... [illegible] ... water sinks ... [illegible] ... the mouth of the canyon ... [illegible]

## [illegible] CREEK BASIN

[illegible] ... mountains and ... [illegible] ... This ... [illegible] ... creeks, which ... [illegible]

northern portion of the Santa Monica Range and the lower foothill country to the north. The rocks throughout the basin are shale, sandstone, and conglomerate, with good soil covering. A sparse growth of timber covers the higher elevations, but the greater part of this area has a covering of brush and grass, which is used extensively for pasturage, with small areas of cultivated land for raising grain. A reservoir has been constructed on the upper reaches of Triunfo Creek and the waters are used for irrigation within the basin during the summer. This reservoir covers an area of about 300 acres when filled.

The mean precipitation in this basin amounts to about 2[?] inches annually and falls wholly in the form of rain.

## SANTA CLARA RIVER BASIN.

Santa Clara River rises in the northwest end of the Sierra Madre, in Los Angeles County, Cal., and flows westward through what are known locally as the Piru, Sespe, and Santa Clara valleys. The stream is augmented by five tributaries, which enter it from the north. They are the San Francisquito, the Castac, the Piru, the Sespe, and the Ojai. The river passes through Ventura County and empties into the Pacific Ocean about 6 miles south of Ventura.

A remarkable feature is the small run-off from this large drainage basin. The flood stages of the stream are almost wholly in the winter months, and at most points on the drainage line the channel is dry during the summer.

The valley through which the river flows is of a high order agriculturally, growing all the citrous fruits common to California.

## VENTURA RIVER BASIN.

Ventura River drains a small area lying almost wholly in Ventura County. The river rises in the eastern part of Santa Barbara County and flows in general southeastward to Matilija, where it turns and takes a course more nearly south to its entrance to the Pacific at Ventura.

## SANTA YNEZ RIVER BASIN.

Santa Ynez River is the only important stream lying wholly in Santa Barbara County. Its drainage basin lies north of the Santa Ynez Mountains, extending for a distance of about 80 miles parallel to the coast line, and comprising approximately 900 square miles. Four-fifths of this area is mountainous, including the north slope of the Santa Ynez and the south slope of the San Rafael Mountains, and furnishes practically all of the run-off.

Santa Ynez River rises near the boundary line between Ventura and Santa Barbara counties, where the Santa Ynez and San Rafael mountain ranges merge, flows nearly due west, and enters the Pacific

[illegible] where [illegible].

[illegible] Mono Creek [illegible] the San Rafael Mountains [illegible] the Santa Ynez River about [illegible] miles [illegible].

[illegible] Santa Ynez [illegible] from [illegible] in the San Rafael Mountains [illegible] feet [illegible] The rocks [illegible] the entire basin consist of shale, sandstone, and conglomerate.

The greater part of the [illegible] basin is included in a national forest [illegible] small trees [illegible] small areas [illegible] growth of timber.

The mean annual [illegible] the area ranges from 20 to 30 inches [illegible] the higher altitudes [illegible] snowfall on the [illegible] winter.

[illegible] above Lompoc, and [illegible] water [illegible] flow of the stream. The basin affords good [illegible] have already been [illegible] and their [illegible] exceeds the mean annual run-off.

No important water-power development is possible in the Santa Ynez basin.

## SANTA MARIA RIVER BASIN

Santa Maria River drains the northern slope of the San Rafael Mountains and a smaller area of foothill country north of this range. It flows westward, finally discharging its waters into the Pacific Ocean at Guadalupe, about 25 miles south of San Luis Obispo. Its flow is torrential; it is subject to floods of short duration during the rainy period, but is practically dry during the summer. It has numerous tributaries, the most important of which is the Sisquoc, which enters it about 12 miles above the town of Santa Maria. The country in this basin consists of rolling foothills, except the higher elevations of the San Rafael Mountains, which reach elevations of 6,000 to 8,000 feet. The river breaks from the foothills at a point where it is joined by the Sisquoc and flows through the flat country of the Santa Maria Valley for about 25 miles until it joins the Pacific Ocean. The rocks in this basin consist of shale, sandstone, and conglomerate, which are covered by a heavy clay soil. There is a considerable growth of timber on the higher parts of the San Rafael Mountains, but over most of the area the growth of timber is light,

and large areas are covered with brush and grass. Pasturage is carried on extensively throughout the basin. There are no diversions along this stream for irrigation, although tunnel work has been attempted above Santa Maria for developing underground water with poor results. Numerous wells in the vicinity of Santa Maria produce considerable water for irrigating land in that locality, the soil being very deep and exceptionally good, susceptible of the highest cultivation. The mean precipitation in this basin is probably about 25 inches. The greatest rainfall occurs on the lower elevations near the coast. The higher elevations receive some snowfall, which melts early in the spring and does not tend to keep up the flow of the streams through the summer.

## SALINAS RIVER BASIN

The Salinas River basin lies almost wholly in Monterey and San Luis Obispo counties, and comprises about [illegible] square miles, having a length of [illegible] miles northwest-southeast and a maximum width of about 45 miles.

The Salinas rises on the east slope of the Santa Lucia Range near the south end of the basin and flows northwestward, parallel to the coast, to its mouth, about 4 miles southwest of Castroville.

Topographically the Salinas basin is a long narrow valley walled in by steep mountain slopes, which have been greatly eroded and dissected by streams. At the north end of the basin are the Gabilan Range and the Sierra de Salinas, separating it from the San Benito basin at the east and from Carmel River at the west. For the rest of its length it is flanked by parallel ridges on the west and by a broad mesa or elevated plain along the southeast, back of which are the crests of the Santa Lucia and Mount Diablo ranges, respectively. The crest of the encircling mountains ranges in altitude from 2,500 to 4,000 feet above sea level. The rocks are sedimentary and rest on a basement complex of granite.

The forest cover in this basin is light and irregularly distributed. The valley contains a few scattered trees and the eastern slopes are covered by grass, brush, and scrubby timber. On the higher elevations of the western slope there is considerable timber, most of which is included in a national forest reserve.

The mean annual precipitation is about [illegible] inches in the Salinas Valley, and increases with increase of altitude on the slopes. It is undoubtedly greatest on the west slope of the basin, where it probably ranges from 30 to 50 inches on the higher elevations and occurs almost entirely as rainfall.

The river has many tributaries, the most important of which, from north to south, are Arroyo Seco, San Antonio River, and Nacimiento River from the west and San Lorenzo and Estrella creeks from the

[illegible] peculiar [illegible] main range [illegible] parallel [illegible] a com- [illegible] Salinas River [illegible] torrential and erratic, particularly [illegible] discharge in winter and ord- [illegible] in excess [illegible] below [illegible] the water [illegible] obtained [illegible] further development [illegible]

[illegible] of more or less value [illegible] which have already been [illegible]

[illegible] Salinas [illegible]

## NORTH [illegible] COAST DRAINAGE BASINS.

[illegible] California [illegible] Klamath [illegible]

## [illegible] RIVER BASIN.

[illegible] County of [illegible] southeastward [illegible] Pacific [illegible] miles [illegible] Creek [illegible]

[illegible] year [illegible]

## [illegible] RIVER BASIN.

[illegible] Eel [illegible] River [illegible] River [illegible]

The lower port[illegible] South Fork, is in [illegible] semiopen and contains [illegible] small tract near [illegible] and well cultivated. [illegible] grass and are used [illegible]

The precipitation [illegible] during the winter.

## [illegible] RIVER BASIN.

Mad River rises [illegible] northwestward across [illegible] total length is about [illegible] miles.

The basin is very [illegible] upper and lower [illegible] part is suitable only for grazing.

During the rainy season [illegible] of its course its channel is [illegible] water standing in [illegible] the year, but is insufficient [illegible]

The lower course [illegible] The remainder of the basin [illegible] grass and scrubby timber [illegible]

The gaging station, which is [illegible] the Oregon & Eureka Railroad [illegible] and 1 mile below Warren Creek [illegible]

The gage is a vertical staff [illegible] railroad bridge.

Discharge measurements are made [illegible] above the railroad bridge.

## KLAMATH RIVER BASIN.

Klamath River drains a [illegible] in south-central Oregon and [illegible] fornia. The river rises in Upper Klamath [illegible] southward, and reaches the Pacific Ocean [illegible] northern California. Only that part of the [illegible] been studied in detail. The drainage [illegible] collected in large lakes whose margins are [illegible] covered with tules and aquatic plants. From Upper Klamath Lake, which stands 4,141 feet above sea level, flows Link River [illegible] miles long, discharging into Lake Ewauna [illegible] Klamath Falls, the principal city of this section [illegible] River. From Lake Ewauna to the town of Keno, Klamath River flows through a flat, marshy country a distance of [illegible] About 5

[illegible]

[illegible]

[illegible]

in the central part of T. [illegible] N., R. [illegible] E. [illegible] then in general southwestward [illegible] North Fork. Below [illegible] southwestward to the north-central [illegible] it turns abruptly to the west [illegible] continues to flow to the point [illegible] T. 18 N., R. 1 W. The length [illegible] Middle Fork is about [illegible] miles [illegible] Fork are Preston and [illegible]

The North Fork [illegible] Josephine County, Oreg., and flows [illegible] into Del Norte County, Cal. [illegible] is about 20 miles; the [illegible]

The South Fork [illegible] North and Middle forks [illegible] Mountains, in the northern [illegible] and meridian; flows in general [illegible] northwesterly to its junction [illegible] of T. 16 N., R. 1 E. Including [illegible] long. Its principal [illegible] Gorton, and Coon creeks from [illegible] from the south.

## [illegible]

### [illegible]

The stream-flow data [illegible] comprise (1) records of [illegible] of stage or gage height [illegible] (2) estimates of daily and [illegible]

Gaging stations are in general [illegible] ment is likely to take place [illegible] the water surface and points [illegible] gage are recorded [illegible] in stage is recorded by an automatic gage [illegible] are made by the engineers of [illegible] rent meter [illegible] on a cable or a boat or by wading [illegible] on the location of the station [illegible]

By plotting the results of measurements [illegible] responding gage heights [illegible] are drawn from which a rating [illegible] height can be prepared. From these [illegible] heights daily estimates of flow are [illegible]

More detailed description [illegible] preparing these data for publication [illegible]

[illegible]

sections of Water-Supply Paper 271, "Surface water supply of California, 1909." [1]

## DEFINITION OF TERMS.

The volume of water flowing in a stream—the "run-off" or "discharge"—is expressed in various terms, each of which has become associated with a certain class of work. These terms may be divided into two groups: (1) Those which represent a rate of flow, as second-feet, gallons a minute, miner's inches, and run-off in second-feet per square mile, and (2) those which represent the actual quantity of water, as run-off in depth in inches and acre-feet. The units used in this series of reports are second-feet, second-feet per square mile, and run-off in inches and acre-feet. They may be defined as follows:

"Second-foot" is an abbreviation for cubic foot per second and is the unit for the rate of discharge of water flowing in a stream 1 foot wide, 1 foot deep, at a rate of 1 foot per second. It is generally used as a fundamental unit from which others are computed by the use of the factors given in the table of equivalents on page 54.

"Second-feet per square mile" is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

"Miner's inch" represents a rate of flow and varies in different States, as noted in the table of convenient equivalents (p. 54). In California it was legalized by an act approved March 23, 1901, as one-fortieth of a second-foot. Prior to the passage of this act the common usage was one-fiftieth of a second-foot. The act reads as follows:

SECTION 1. The standard miner's inch of water shall be equivalent or equal to 1½ cubic feet of water per minute, measured through any aperture or orifice.

SEC. 2. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

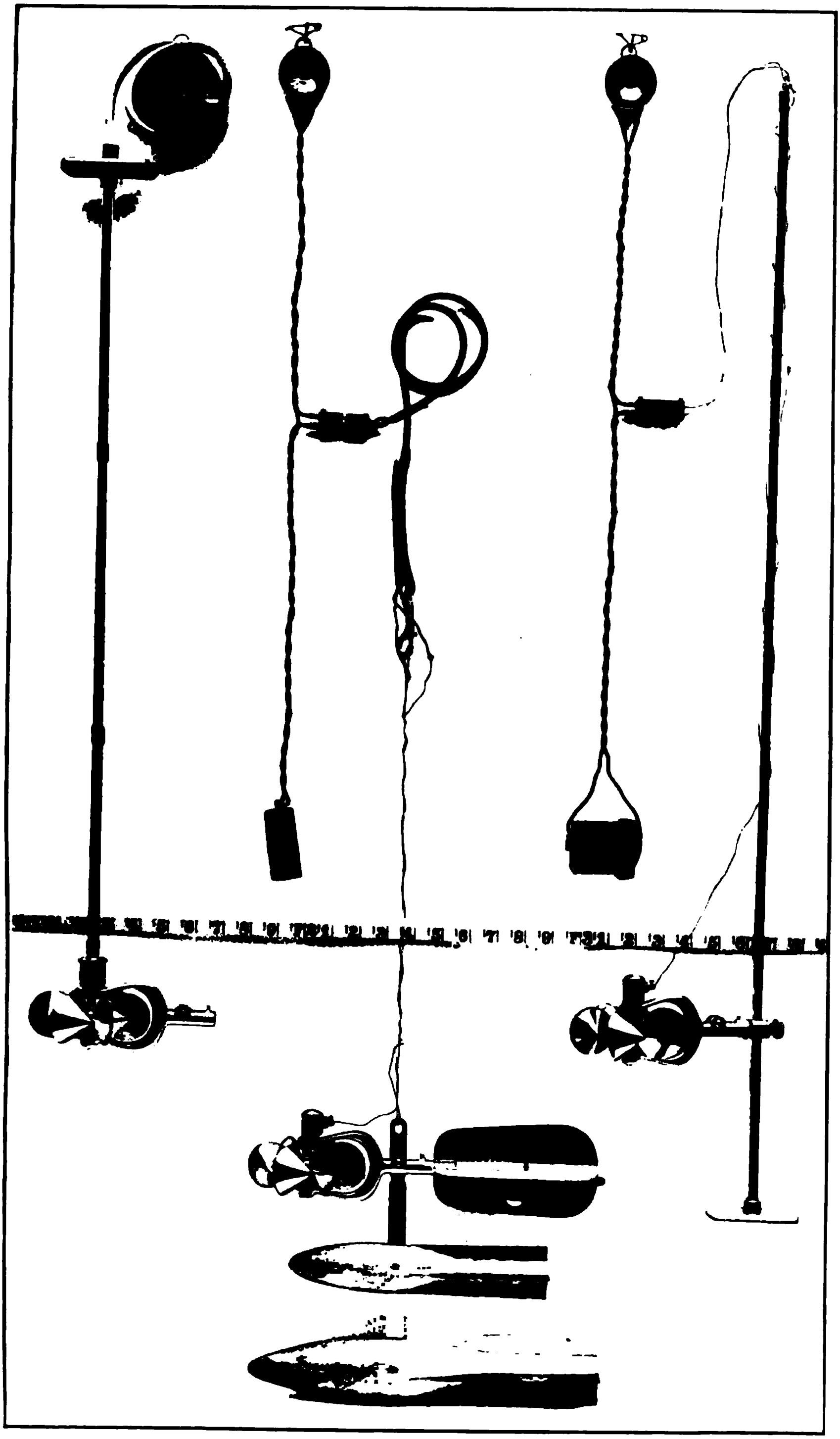
SEC. 3. This act shall be in effect and force sixty days from and after its passage.

One-fiftieth of a second-foot is still used in southern California.

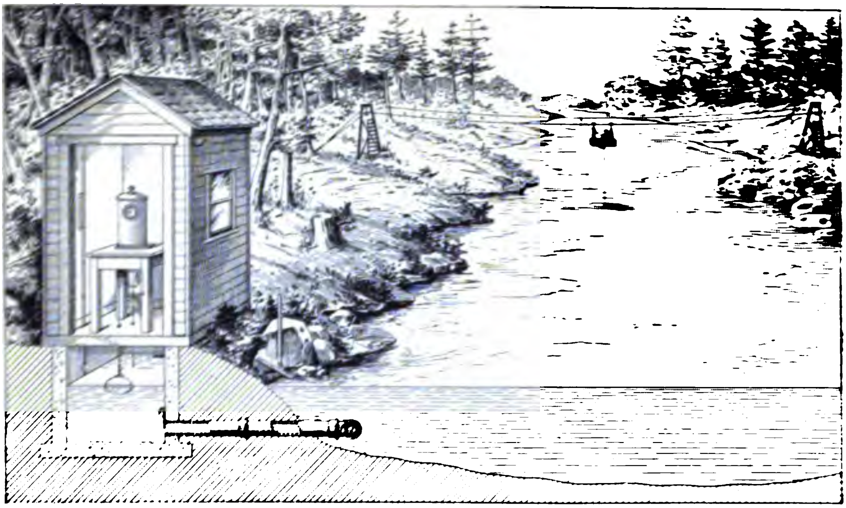
"Run-off depth in inches," is the depth to which the drainage area would be covered if all the water flowing from it in a given period were conserved and uniformly distributed on the surface. The term is used for comparing run-off with rainfall, which is usually expressed in depth in inches.

An "acre-foot" is equivalent to 43,560 cubic feet, and is the quantity required to cover an acre to the depth of 1 foot. The term is commonly used in discussions of storage for irrigation work.

[1] See also Hoyt, J. C., and others, Use and care of current meter as practiced by the United States Geological Survey: Trans. Am. Soc. Civil Eng., vol. 66, 1910, p. 70.



SMALL PRICE CURRENT METERS.



*A.* CABLE STATION, SHOWING AUTOMATIC GAGE.

*B.* FOR BRIDGE MEASUREMENT.

TYPICAL GAGING STATIONS.

## EXPLANATION OF DATA.

The stations discussed in this paper are considered in order downstream. Records for all stations on the main river, from its source to its mouth, are presented first, and records for its tributaries in regular order, from source to mouth, follow, all records for each tributary drainage basin being given before those of the next basin below.

For each drainage basin there is given a brief general description covering such items as area, source, tributaries, topography, geology, forestation, rainfall, irrigation, storage, power, and other interesting or important facts.

For each regular current-meter gaging station the following data, so far as available, are given: Description of station, list of discharge measurements, table of daily gage heights, table of daily discharge, table of monthly and yearly discharge and run-off. For stations located at weirs or dams the gage-height table is omitted.

In addition to statements regarding the location and installation of current-meter stations, the descriptions give information in regard to any conditions which may affect the constancy of the relation of gage height to discharge, covering such things as ice, logging, shifting channels, and backwater; also information regarding diversions which decrease the total flow at the measuring section. Statements are also made regarding the accuracy and reliability of the data.

The discharge-measurement table gives the results of the discharge measurements made during the year, including the date, name of hydrographer, gage height in feet, and discharge in second-feet.

The table of daily gage heights records the daily fluctuations of the surface of the river as found from the mean of the gage readings taken each day. At most stations the gage is read in the morning and in the evening. The gage height given in the table represents the elevation of the surface of the water above the zero of the gage. All gage heights affected by the presence of ice in the streams, or by backwater from obstructions, are published as recorded, with suitable footnotes. The rating table is not applicable for such periods unless the proper corrections to the gage heights are known and applied. Attention is called to the fact that the zero of the gage is placed at an arbitrary datum and has no relation to zero flow or the bottom of the river. In general, the zero is located somewhat below the lowest known flow, so that the readings shall not be of negative values.

The discharge measurements and gage heights are the base data from which rating tables, daily-discharge tables, and monthly-discharge tables are computed.

The rating table gives, either directly or by interpolation, the discharge in second-feet corresponding to every stage of the river recorded during the period for which it is applicable. In general,

rating tables are published only for stations maintained prior to 1909. Rating tables for later years can be made from the daily gage heights and daily discharge for the purpose of verifying the published results as follows:

First plot the discharge measurements for the current and earlier years on cross-section paper with gage heights in feet as ordinates and discharge in second-feet as abscissas. Then tabulate a number of gage heights taken from the daily gage-height table for the complete range of stage given and the corresponding discharge for the days selected from the daily discharge table, and plot the values on cross-section paper. The last points plotted will define the rating curve used and will lie among the plotted discharge measurements. After drawing the rating curve, a table can be developed by scaling off the discharge in second-feet for each tenth foot of gage height. These values should be so adjusted that the first differences shall always be increasing or constant, except for known conditions of backwater.

The table of daily discharge gives the discharge in second-feet corresponding to the observed gage heights as determined from the rating tables.

In the table of monthly discharge the column headed "Maximum" gives the mean flow, as determined from the rating table, for the day when the mean gage height was highest. As the gage height is the assumed mean for the day, it does not indicate correctly the stage when the water surface was at crest height and the corresponding discharge was consequently larger than given in the maximum column. Likewise, in the column headed "Minimum" the quantity given is the mean flow for the day when the mean gage height was lowest. The column headed "Mean" is the average flow in cubic feet for each second during the month. On this the computations for the remaining columns are based.

## ACCURACY AND RELIABILITY OF FIELD DATA AND COMPARATIVE RESULTS.

The accuracy of stream-flow data depends primarily on the natural conditions at the gaging station and on the methods and care with which the data are collected. Errors of the first group depend on the degree of permanency of channel and of permanency of the relation between discharge and stage.

Errors of the second class are due, first, to errors in observation of stage; second, to errors in measurements of flow; and third, to errors due to misinterpretation of stage and flow data.

In order to give engineers and others information regarding the probable accuracy of the computed results, footnotes are added to the daily discharge tables, stating the probable accuracy of the rating tables used, and an accuracy column is inserted in the monthly dis-

charge table. For the rating tables "well defined" indicates, in general, that the rating is probably accurate within 5 per cent; "fairly well defined" within 10 per cent; "poorly defined" or "approximate" within 15 to 25 per cent. These notes are very general and are based on the plotting of the individual measurements with reference to the mean rating curve.

The accuracy column in the monthly discharge table does not apply to the maximum or minimum nor to any individual day, but to the monthly mean. It is based on the accuracy of the rating, the probable reliability of the observer, and knowledge of local conditions. In this column A indicates that the mean monthly flow is probably accurate within 5 per cent; B, within 10 per cent; C, within 15 per cent; D, within 25 per cent. Special conditions are covered by footnotes.

Even though the monthly means for any station may represent with a high degree of accuracy the quantity of water flowing past the gage, the figures showing discharge per square mile and depth of run-off in inches may be subject to gross errors, which result from including in the measured drainage area large noncontributing districts or omitting estimates of water diverted for irrigation or other use, and they should, therefore, be considered as only approximate, particularly for periods of irrigation or of low water. For these errors it is as a rule not feasible to make adequate correction.

In general, the base data collected each year by the Survey's engineers are published not only to comply with the law but also to afford any engineer the means of examining and adjusting to his own needs the results of the computations. The table of monthly discharge is so arranged as to give only a general idea of the flow at the station and should not be used for other than preliminary estimates. The determinations of daily discharge allow more detailed studies of the variation in flow by which the period of deficiency may be determined.

It should be borne in mind that the observations in each succeeding year may be expected to throw new light on data already collected and published, and the engineer who makes use of the figures presented in these papers should verify all ratings and make such adjustments for earlier years as may seem necessary.

## CONVENIENT EQUIVALENTS.

[illegible] is a list of convenient equivalents [illegible] computations:

[illegible] discharge in second-feet [illegible] run-off [illegible] over the area.

| | | Run-off depth in inches. | | | |
|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] days. | [illegible] days. | [illegible] days. | [illegible] days. |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 04.[illegible] | [illegible]373 |

[illegible] inches for one day by the number of days.

[illegible] discharge in second-feet into run-off in acre-feet.

| | | Run-off in acre-feet. | | | |
|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] days. | [illegible] days. | [illegible] days. | [illegible] days. |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible] for one day [illegible] the number of days.

[illegible] California miner's inches (law of March 23, 1901).

[illegible] Colorado miner's inches.

[illegible] miner's inches.

[illegible] United States gallons per second; equals 448.[illegible] gallons per [illegible] for one day.

[illegible] square mile [illegible] 31 feet or 13.572 inches deep.

[illegible] 1,3[illegible] cubic feet.

[illegible] about [illegible] per hour.

[illegible] equals [illegible] cubic feet.

[illegible] United States billion [illegible] cubic feet equals 11,570 second-feet for 1 day.

[illegible] equals [illegible] second-feet for one 28-day month.

[illegible] equals [illegible] second-feet for one 29-day month.

[illegible] equals [illegible] second-feet for one 30-day month.

[illegible] equals [illegible] second-feet for one 31-day month.

[illegible] equals [illegible] United States gallons per second.

[illegible] for one day equals [illegible] acre-feet.

[illegible] equals [illegible] second-feet.

[illegible] equals 19.5 United States gallons per second.

100 Colorado miner's inches [illegible]
100 United States gallons per [illegible]
100 United States gallons per [illegible]
1,000,000 United States gallons per [illegible]
1,000,000 United States gallons [illegible]
1,000,000 cubic feet equals [illegible]
1 acre-foot equals [illegible] gallons.
1 inch deep on one square mile [illegible]
1 inch deep on 1 square mile [illegible]
1 foot equals 0.3048 meter.
1 mile equals 1.60935 kilometers.
1 mile equals 5,280 feet.
1 acre equals 0.4047 hectare.
1 acre equals 43,560 square feet.
1 acre equals 209 feet square, [illegible]
1 square mile equals [illegible] square kilometers.
1 cubic foot equals [illegible]
1 cubic foot of water weighs [illegible]
1 cubic meter per minute equals [illegible]
1 horsepower equals 550 [illegible] per second.
1 horsepower equals [illegible] per second.
1 horsepower equals 746 watts.
1 horsepower equals [illegible]
1½ horsepower equals about [illegible]

To calculate water power quickly: [illegible]

wheel realizing 80 per cent of [illegible] power.

## GAGING STATIONS.

The following list comprises [illegible] Great Basin and Pacific coast drainage [illegible] to July 1, 1912. It [illegible] tained in California, exclusive of [illegible] Joaquin drainage basins. The [illegible] order, tributaries being [illegible] date implies that the station was [illegible]

### GREAT BASIN.

Honey Lake basin:
- Susan River near Susanville, [illegible]
  - Willow Creek at [illegible]
  - Willow Creek near [illegible]

Truckee River basin:
- Lake Tahoe at Tahoe, 1900–
- Truckee River at Tahoe, 1895–96; [illegible]
- Truckee River near Nevada-California State line, [illegible]
  - Donner Creek near Truckee, [illegible]
  - Prosser Creek near Truckee, 1903–4; [illegible]
  - Prosser Creek near Boca, 1902–3.
  - Little Truckee River at Starr, [illegible]
  - Little Truckee River at Boca, [illegible]
    - Independence Creek below Independence [illegible]

Carson Sink basin.
- West Fork of Carson River at Woodfords, 1900–
- East Fork of Carson River at Silver King Valley, [illegible]

Carson Sink basin—Continued.

East Fork of Carson River near Markleeville, 1910–

Silver Creek near Markleeville, 1910–

Markleeville Creek near Markleeville, 1911–

Markleeville Creek [illegible] Markleeville, 1910–

Pleasant Valley Creek [illegible] Markleeville, 1910–

Walker Lake basin:

West Walker River near Coleville, 1902–1906.

East Walker River near Bridgeport, 1911–

Robinson Creek near Bridgeport, 1911–

Buckeye Creek near Bridgeport, 1911–

Swauger Creek near Bridgeport, 1911–

Mono Lake basin:

Rush Creek near Mono Lake, 1911–

Leevining Creek near Mono Lake, 1911–

Owens Lake basin:

[illegible] 1908–

[illegible] 1908–

[illegible] 1908–

[illegible] 1908–

[illegible] 1908–

[illegible]

[illegible] 1908–

[illegible]

[illegible]

[illegible]

[illegible] 1908–1911.

[illegible] 1908–1911.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] canal near [illegible] 1902–1905.

[illegible] canal near [illegible] 1902–1905.

[illegible] canal near [illegible] 1902–1905.

[illegible] 1905–1905.

[illegible] canal near [illegible] 1905–1905.

[illegible] 1905–1905.

[illegible] 1905–1905.

[illegible] 1905–1905.

Owens Lake basin—Continued.
    Owens River canals—Continued.
        Powers canal near Bishop, 1903–1905.
        South Hillside canal near Bishop, 1903–1905.
        North Hillside canal near Bishop, 1903–1905.
Mohave River at Victorville, 1899–1906.
Antelope Valley:
    Little Rock Creek near Palmdale, 1896–1899.
Salton Sea near Salton, 1904–
    Alamo River near Brawley, 1908–1912.
    New River near Brawley, 1908–1910.
Colorado River basin:
    Colorado River at Hardyville, Ariz., 1905–1907.
    Colorado River near Mohave, Ariz., 1902–3.
    Colorado River at Yuma, Ariz., 1891–
        Imperial Valley canals:
            Imperial canal near Yuma, Ariz., 1903–5.
            Imperial canal near Calexico, 1904–5.
            Holt canal near Calexico, 1904–5.
            Hemlock canal near Calexico, 1904–5.
            Alamitos canal near Calexico, 1904–5.
            Boundary canal near Calexico, 1904–5.
            Wisteria canal near Calexico, 1905.

### SOUTH PACIFIC COAST DRAINAGE BASINS.

Tia Juana River.
    Cottonwood Creek and Dulzura conduit near Jamul, 1905–
        Pine Valley Creek near Jamul, 1906–1908.
Sweetwater River near Descanso, 1905–
San Diego River and canal near Lakeside, 1905–
San Dieguito River basin:
    Santa Ysabel Creek near Escondido, 1905–
    Santa Ysabel Creek near Ramona, 1912–
    San Dieguito River at Bernardo, 1911–
San Luis Rey River at diversion flume, 1894–1899.
San Luis Rey River near Mesa Grande, 1911–
San Luis Rey River near Pala, 1903–
San Luis Rey River at Bonsall, 1912–
Santa Margarita River basin:
    Temecula Creek near Temecula, 1905–6.
Santa Ana River and power canal near Mentone, 1896–
    Waterman Canyon Creek near San Bernardino, 1911–
    Devil Canyon Creek near San Bernardino, 1911–
San Gabriel River and power canal near Azusa, 1895–
Los Angeles River basin:
    Arroyo Seco near Pasadena, 1910–
Malibu Creek near Calabasas, 1903–1906.
    Triunfo Creek near Calabasas, 1903–1906.
Santa Clara River at Fillmore, 1911–
    Piru Creek near Piru, 1911–
    Sespe Creek near Sespe, 1911–
    Santa Paula Creek near Santa Paula, 1911–
Ventura River near Nordhoff, 1911–
Ventura River near Ventura, 1911–
Santa Ynez River basin:
    Santa Ynez River near Santa Barbara, 1903–
    Santa Ynez River near Lompoc, 1906–
        Mono Creek at Mono dam site, 1902–1904.

Santa Maria River near Santa Maria, 1903-1906.
Salinas River near Salinas, 1900-1901.
  Nacimiento Creek near Bryson, 1901.
  San Antonio River near Jolon, 1900-1901.
  San Lorenzo Creek near King City, 1900-1903, 1912.
  Arroyo Seco near Soledad, 1900-
Pajaro River at Watsonville, 1911-

NORTH PACIFIC COAST DRAINAGE BASINS.

Russian River basin:
  Russian River at Ukiah, 1911-
  Russian River at Geyserville, 1910-
    East Fork of Russian River near Ukiah, 1911-
Mattole River near Petrolia, 1911.
Eel River basin:
  South Eel River at Hearst, 1910-
  Eel River near Laytonville, 1911-
  Eel River at Scotia, 1910-
    Middle Eel River near Covelo, 1911-
    South Fork of Eel River at Garberville, 1911-
    Van Duzen River at Bridgeville, 1911-
      Yager Creek at Carlotta, 1911-
Mad River near Arcata, 1910-
Redwood Creek near Korbel, 1911-
Redwood Creek at Orick, 1911-
Klamath River basin:
  Klamath River near Happy Camp, 1911-
  Klamath River near Requa, 1910-
    Lost River near Clear Lake, 1904-1909.
    Shasta River near Montague, 1911-
    East Fork of Scott River near Callahan, 1910-
    Scott River near Scott Bar, 1911-
    Indian Creek near Happy Camp, 1911-
      Reeve Davis Consolidated Mining Co.'s ditch near Happy Camp, 1911-
    Salmon River near Somesbar, 1911-
    Trinity River near Trinity Center, 1910-
    Trinity River at Lewiston, 1910-
    Trinity River near China Flat, 1911-
    Trinity River at Hoopa, 1911-
      Coffee Creek at Coffee, 1910-
      East Fork of Trinity River near Trinity Center, 1910-
      Swift Creek near Trinity Center, 1910-
      North Fork of Trinity River at Helena, 1911-
      South Fork of Trinity River near China Flat, 1911-
Smith River basin:
  Middle Fork of Smith River near Crescent City, 1911-
  North Fork of Smith River near Crescent City, 1911-
    South Fork of Smith River near Crescent City, 1911-

## THE GREAT BASIN.

### HONEY LAKE BASIN.

#### SUSAN RIVER NEAR SUSANVILLE, CAL.

This station, which was located about three-fourths of a mile southwest of Susanville at the electric-light plant, was established June 3, 1900, and was discontinued December 31, 1905.

The temporary staff gage established in 1900 was replaced by a permanent staff gage installed December 20, 1903, and the datum of the gage was lowered 2 feet.

The bed of the stream is composed of gravel and cobblestones and is permanent. The channel is straight for 100 feet above and 250 feet below the station. The right bank is high, is composed of clay, and is covered with vegetation. It is not liable to overflow. The left bank is low, is covered with a sparse growth of willows, and is likely to overflow. The current is swift. There is a riffle immediately above the cable.

High-water measurements were made by means of a car and cable. At low and ordinary stages measurements were made by wading.

A short distance above the station a small irrigating ditch, known as the Masten ditch, is taken out on the right bank. A gage is also placed in the flume near the head of the ditch. On July 5, 1900, the Masten ditch was discharging 7 second-feet and on July 9, 1903, it was discharging 7.1 second-feet.

*Discharge measurements of Susan River near Susanville, Cal., in 1900–1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1900. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| June 30 | L. H. Taylor | 3.20 | 40 | Mar. 29 | James Branham | 7.55 | 716 |
| July 5 | .....do | 2.60 | 8 | June 16 | Bennett and Evans | 5.60 | 180 |
| | | | | 29 | James Branham | 4.95 | 96 |
| 1901. | | | | July 31 | .....do | 4.20 | 27 |
| Mar. 16 | .....do | 4.30 | 274 | Aug. 10 | .....do | 4.50 | 43 |
| Apr. 5 | .....do | 4.00 | 178 | Sept. 11 | .....do | 3.85 | 11 |
| May 20 | .....do | 4.50 | 351 | Oct. 25 | Clapp and Toler | 4.10 | 23 |
| June 7 | .....do | 3.60 | 84 | | | | |
| | | | | 1905. | | | |
| 1903. | | | | Mar. 21 | James Branham | 6.60 | 441 |
| July 9 | G. B. Lorenz | 1.90 | 7.6 | May 12 | .....do | 5.40 | 157 |
| Dec. 20 | H. E. Green | 4.45 | 24 | June 12 | .....do | 4.70 | 72 |
| | | | | 25 | .....do | 4.20 | 30 |
| 1904. | | | | July 23 | .....do | 3.85 | 12.8 |
| Feb. 21 | James Branham | 5.30 | 106 | Aug. 29 | .....do | 3.75 | 6.9 |
| 28 | .....do | 6.40 | 298 | Sept. 26 | .....do | 4.00 | 15.4 |

*Daily gage height, in feet, of Susan River near Susanville, Cal., for 1900–1905.*

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1900. | | | | | | | | | |
| 1 | | 2.7 | 2.45 | 2.4 | 16 | 3.15 | 2.4 | 2.4 | 2.35 |
| 2 | | 2.65 | 2.4 | 2.4 | 17 | 3.1 | 2.4 | 2.45 | 2.35 |
| 3 | | 2.65 | 2.4 | 2.4 | 18 | 3.05 | 2.4 | 2.45 | 2.35 |
| 4 | 3.2 | 2.6 | 2.4 | 2.4 | 19 | 3.05 | 2.4 | 2.45 | 2.35 |
| 5 | 3.15 | 2.6 | 2.35 | 2.4 | 20 | 3.05 | 2.4 | 2.4 | 2.35 |
| 6 | 3.1 | 2.6 | 2.35 | 2.4 | 21 | 3.05 | 2.4 | 2.4 | 2.35 |
| 7 | 3.1 | 2.55 | 2.4 | 2.4 | 22 | 3.0 | 2.4 | 2.4 | 2.35 |
| 8 | 3.05 | 2.55 | 2.45 | 2.4 | 23 | 3.0 | 2.4 | 2.4 | 2.35 |
| 9 | 3.0 | 2.55 | 2.4 | 2.4 | 24 | 3.0 | 2.45 | 2.4 | 2.35 |
| 10 | 3.0 | 2.5 | 2.4 | 2.4 | 25 | 2.95 | 2.45 | 2.35 | 2.4 |
| 11 | 3.0 | 2.45 | 2.4 | 2.4 | 26 | 2.9 | 2.45 | 2.4 | 2.4 |
| 12 | 2.95 | 2.4 | 2.4 | 2.4 | 27 | 2.75 | 2.45 | 2.4 | 2.4 |
| 13 | 3.1 | 2.4 | 2.4 | 2.35 | 28 | 2.8 | 2.45 | 2.45 | 2.4 |
| 14 | 3.1 | 2.4 | 2.4 | 2.35 | 29 | 2.7 | 2.45 | 2.4 | 2.4 |
| 15 | 3.1 | 2.4 | 2.4 | 2.35 | 30 | 2.6 | 2.45 | 2.4 | 2.4 |
| | | | | | 31 | | 2.45 | 2.4 | |

*Daily gage height, in feet, of Susan River near Susanville, Cal., for 1900-1905*—Con

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1900-1901.** | | | | | | | | | | | | |
| 1 | 2.40 | 2.65 | 3.00 | 3.20 | 3.10 | 5.55 | 4.10 | 4.90 | 3.92 | 2.65 | 2.25 | |
| 2 | 2.40 | 2.65 | 3.00 | 3.20 | 3.10 | 5.45 | 4.15 | 4.88 | 3.90 | 2.75 | 2.25 | |
| 3 | 2.70 | 2.65 | 3.00 | 3.20 | 3.10 | 5.06 | 4.07 | 4.87 | 3.85 | 2.80 | 2.20 | |
| 4 | 2.60 | 2.65 | 2.95 | 3.20 | 3.10 | 4.95 | 4.00 | 4.85 | 3.80 | 2.75 | 2.20 | |
| 5 | 2.60 | 2.65 | 2.95 | 3.20 | 3.10 | 4.90 | 4.00 | 4.85 | 3.72 | 2.70 | 2.20 | |
| 6 | 2.60 | 2.60 | 2.90 | 3.30 | 3.10 | 4.90 | 4.00 | 4.93 | 3.65 | 2.70 | 2.15 | |
| 7 | 2.60 | 2.70 | 2.90 | 3.30 | 3.10 | 5.00 | 3.90 | 4.95 | 3.63 | 2.60 | 2.15 | |
| 8 | 2.65 | 2.70 | 2.90 | 3.30 | 3.10 | 4.75 | 3.85 | 5.00 | 3.55 | 2.50 | 2.15 | |
| 9 | 2.65 | 2.70 | 2.90 | 3.25 | 3.10 | 4.73 | 3.80 | 5.00 | 3.50 | 2.55 | 2.15 | |
| 10 | 2.50 | 2.70 | 2.90 | 3.25 | 3.10 | 4.55 | 3.80 | 5.05 | 3.40 | 2.83 | 2.10 | |
| 11 | 2.50 | 2.70 | 2.90 | 3.25 | 3.10 | 4.50 | 3.90 | 5.08 | 3.30 | 2.85 | 2.30 | |
| 12 | 2.50 | 2.70 | 2.90 | 3.25 | 3.10 | 4.45 | 4.13 | 5.07 | 3.25 | 2.85 | 2.50 | |
| 13 | 2.50 | 2.70 | 2.90 | 3.20 | 3.10 | 4.20 | 4.35 | 5.10 | 3.20 | 2.83 | 2.50 | |
| 14 | 2.55 | 2.70 | 2.90 | 3.20 | 3.20 | 4.25 | 4.60 | 5.10 | 3.15 | 2.80 | 2.50 | |
| 15 | 2.60 | 2.70 | 2.90 | 3.20 | 3.30 | 4.30 | 4.75 | 5.00 | 3.15 | 2.80 | 2.50 | |
| 16 | 2.60 | 2.90 | 2.90 | 3.20 | 3.70 | 4.20 | 4.70 | 4.95 | 3.10 | 2.80 | 2.45 | |
| 17 | 2.60 | 2.90 | 3.00 | 3.20 | 4.85 | 4.20 | 4.75 | 4.90 | 3.10 | 2.80 | 2.50 | |
| 18 | 2.60 | 2.90 | 3.00 | 3.20 | 4.15 | 4.15 | 4.80 | 4.83 | 3.10 | 2.80 | 2.45 | |
| 19 | 2.90 | 2.90 | 3.10 | 3.20 | 4.06 | 4.15 | 4.97 | 4.72 | 3.05 | 2.78 | 2.45 | |
| 20 | 3.10 | 2.90 | 4.80 | 3.20 | 5.96 | 4.15 | 5.05 | 4.58 | 3.00 | 2.75 | 2.40 | |
| 21 | 2.90 | 4.60 | 4.40 | 3.20 | 5.10 | 4.22 | 5.06 | 4.45 | 2.95 | 2.70 | 2.40 | |
| 22 | 2.80 | 3.80 | 3.80 | 3.15 | 4.80 | 4.30 | 5.05 | 4.20 | 2.90 | 2.70 | 2.4 | |
| 23 | 2.80 | 3.50 | 3.50 | 3.15 | 6.30 | 4.23 | 4.95 | 4.25 | 2.85 | 2.70 | 2.4 | |
| 24 | 2.80 | 3.30 | 3.40 | 3.10 | 5.85 | 4.25 | 4.90 | 4.20 | 2.80 | 2.70 | 2.4 | |
| 25 | 2.75 | 3.80 | 3.30 | 3.10 | 5.65 | 4.55 | 5.00 | 4.25 | 2.80 | 2.68 | 2.3 | |
| 26 | 2.60 | 3.40 | 3.20 | 3.10 | 5.20 | 4.50 | 4.95 | 4.13 | 2.75 | 2.63 | 2. | |
| 27 | 2.60 | 3.30 | 3.20 | 3.10 | 5.60 | 4.45 | 4.87 | 4.10 | 2.70 | 2.53 | 2. | |
| 28 | 2.65 | 3.30 | 3.20 | 3.10 | 5.70 | 4.40 | 4.78 | 4.05 | 2.70 | 2.43 | 2. | |
| 29 | 2.65 | 3.20 | 3.10 | 3.10 | ....... | 4.25 | 5.45 | 4.05 | 2.65 | 2.40 | 2. | |
| 30 | 2.70 | 3.10 | 3.10 | 3.10 | ....... | 4.18 | 4.97 | 4.00 | 2.60 | 2.35 | 2. | |
| 31 | 2.65 | ....... | 3.10 | 3.10 | ....... | 4.05 | ....... | 3.95 | ....... | 2.30 | 2. | |
| **1901-2.** | | | | | | | | | | | | |
| 1 | 2.20 | 2.40 | 3.05 | 2.40 | 2.40 | 3.80 | 3.80 | 4.42 | 4.02 | 2.80 | 1. | |
| 2 | 2.45 | 2.35 | 3.50 | 2.40 | 2.45 | 3.70 | 3.75 | 4.40 | 3.92 | 2.98 | 1. | |
| 3 | 2.40 | 2.35 | 3.76 | 2.40 | 2.50 | 3.70 | 3.80 | 4.32 | 3.85 | 2.88 | 1. | |
| 4 | 2.30 | 2.35 | 4.06 | 2.40 | 2.55 | 3.65 | 3.95 | 4.30 | 3.75 | 2.80 | 1. | |
| 5 | 2.30 | 2.35 | 4.80 | 2.40 | 2.60 | 3.60 | 4.15 | 4.30 | 3.65 | 2.80 | 1 | |
| 6 | 2.30 | 2.35 | 4.25 | 2.40 | 2.65 | 3.40 | 4.32 | 4.45 | 3.55 | 2.75 | 1 | |
| 7 | 2.30 | 2.35 | 3.85 | 2.40 | 2.70 | 3.40 | 5.80 | 4.65 | 3.52 | 2.70 | 1 | |
| 8 | 2.30 | 2.35 | 3.72 | 2.40 | 2.80 | 3.35 | 4.95 | 4.78 | 3.48 | 2.50 | 1 | |
| 9 | 2.30 | 2.35 | 3.50 | 2.40 | 3.30 | 3.30 | 4.68 | 4.75 | 3.42 | 2.38 | 1 | |
| 10 | 2.30 | 2.35 | 3.37 | 2.40 | 3.50 | 3.35 | 4.58 | 4.75 | 3.40 | 2.35 | 1 | |
| 11 | 2.30 | 2.35 | 3.00 | 2.40 | 3.60 | 3.35 | 4.50 | 4.70 | 3.62 | 2.32 | 1 | |
| 12 | 2.30 | 2.40 | 2.92 | 2.40 | 3.50 | 3.40 | 4.50 | 4.65 | 3.30 | 2.30 | 1 | |
| 13 | 2.30 | 2.40 | 2.85 | 2.40 | 3.20 | 3.45 | 4.65 | 4.60 | 3.48 | 2.30 | | |
| 14 | 2.30 | 2.40 | 2.80 | 2.40 | 3.10 | 3.55 | 4.72 | 4.60 | 3.65 | 2.30 | | |
| 15 | 2.30 | 2.40 | 2.75 | 2.40 | 4.10 | 3.56 | 4.90 | 4.55 | 3.62 | 2.25 | | |
| 16 | 2.30 | 2.40 | 2.75 | 2.40 | 3.90 | 3.55 | 5.08 | 4.48 | 3.52 | 2.20 | | |
| 17 | 2.30 | 2.40 | 2.70 | 2.40 | 4.40 | 3.85 | 5.10 | 4.40 | 3.40 | 2.20 | | |
| 18 | 2.30 | 2.40 | 2.70 | 2.40 | 4.20 | 3.60 | 5.25 | 4.32 | 3.32 | 1.95 | | |
| 19 | 2.30 | 2.40 | 2.65 | 2.40 | 4.10 | 3.75 | 5.60 | 4.32 | 3.28 | 1.95 | | |
| 20 | 2.30 | 2.40 | 2.60 | 2.40 | 3.90 | 3.75 | 5.50 | 4.20 | 3.22 | 1.95 | | |
| 21 | 2.30 | 2.45 | 2.60 | 2.40 | 4.10 | 3.70 | 5.25 | 4.08 | 3.20 | 1.90 | | |
| 22 | 2.30 | 2.45 | 2.55 | 2.40 | 4.00 | 3.60 | 5.05 | 3.98 | 3.12 | 1.90 | | |
| 23 | 2.30 | 2.50 | 2.55 | 2.40 | 3.90 | 3.60 | 4.85 | 3.92 | 3.07 | 1.90 | | |
| 24 | 2.35 | 2.55 | 2.50 | 2.40 | 4.20 | 3.50 | 4.85 | 3.90 | 3.00 | 1.90 | | |
| 25 | 2.35 | 2.60 | 2.50 | 2.40 | 4.10 | 3.35 | 4.65 | 3.90 | 2.95 | 1.90 | | |
| 26 | 2.40 | 2.80 | 2.50 | 2.40 | 3.90 | 3.30 | 4.55 | 3.92 | 2.90 | 1.90 | | |
| 27 | 2.40 | 2.70 | 2.45 | 2.40 | 4.10 | 3.35 | 4.50 | 4.05 | 2.90 | 1.90 | | |
| 28 | 2.65 | 3.60 | 2.45 | 2.40 | 3.90 | 3.45 | 4.42 | 4.02 | 2.82 | 1.90 | | |
| 29 | 2.50 | 3.65 | 2.40 | 2.40 | ....... | 3.50 | 4.45 | 4.05 | 2.80 | 1.90 | | |
| 30 | 2.50 | 3.25 | 2.40 | 2.40 | ....... | 3.50 | 4.50 | 4.06 | 2.80 | 1.90 | | |
| 31 | 2.50 | ....... | 2.40 | 2.40 | ....... | 3.65 | ....... | 4.05 | ....... | 1.90 | | |
| **1902-3.** | | | | | | | | | | | | |
| 1 | 1.90 | 2.10 | 2.20 | 3.70 | (a) | 2.40 | 5.30 | 4.75 | 3.20 | 2.10 | | |
| 2 | 1.90 | 2.10 | 2.20 | 3.55 | ....... | 2.40 | 4.75 | 4.75 | 3.20 | 2.05 | | |
| .... | 1.90 | 2.10 | 2.20 | 3.50 | ....... | 2.40 | 4.50 | 4.75 | 3.15 | 2.05 | | |
| .... | 1.90 | 2.10 | 2.22 | 3.40 | ....... | 2.40 | 4.45 | 4.75 | 3.15 | 2.00 | | |
| ... | 2.20 | 2.15 | 2.30 | 3.30 | ....... | 2.40 | 4.30 | 4.67 | 3.10 | 2.00 | | |

frozen over during February, 1903, and observer read the elevation of the top

*Daily gage height, in feet, of Susan River near Susanville, Cal., for 1902–1905*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1902-3.** | | | | | | | | | | | | |
| 6 | 2.20 | 2.15 | 2.35 | 3.30 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | 2.20 | 2.20 | 2.45 | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | 2.20 | 2.20 | 2.55 | 2.90 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 2.20 | 2.20 | 2.55 | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | 2.20 | 2.65 | 3.00 | 2.75 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | 2.20 | 2.40 | 3.50 | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | 1.95 | 2.30 | 3.10 | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 1.95 | 2.28 | 3.00 | 2.50 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 1.95 | 2.22 | 2.85 | 2.50 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 1.95 | 2.20 | 2.55 | 2.40 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 1.95 | 2.28 | 2.50 | 2.40 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | 1.95 | 2.32 | 2.40 | 2.40 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | 1.95 | 2.42 | 2.40 | 2.40 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | 2.00 | 2.40 | 2.30 | 2.40 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | 2.00 | 2.40 | 2.30 | 2.40 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 2.00 | 2.35 | 2.40 | 2.45 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | 2.10 | 2.33 | 2.40 | 2.52 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | 2.15 | 2.30 | 2.45 | 2.55 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | 2.15 | 2.30 | 2.50 | 3.95 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 2.20 | 2.25 | 2.50 | 4.55 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | 2.20 | 2.22 | 5.05 | 3.65 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | 2.20 | 2.20 | 4.75 | 3.45 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 2.20 | 2.20 | 4.60 | 2.90 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 2.15 | 2.20 | 4.45 | 2.70 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 2.15 | 2.20 | 4.28 | 2.60 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | 2.10 | ...... | 3.95 | 2.50 | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... |
| **1903-4.** | | | | | | | | | | | | |
| 1 | 1.85 | 2.06 | 2.82 | 4.3 | [a]4.2 | 6.2 | 6.85 | 6.25 | 6.05 | 4.9 | 4.1 | 2.9 |
| 2 | 1.85 | 2.06 | 2.82 | 4.25 | 4.2 | 6.6 | 4.9 | 6.25 | 6.6 | 5.2 | 4.1 | 2.95 |
| 3 | 1.9 | 2.06 | 2.82 | 4.25 | 4.2 | 7.6 | 4.9 | 6.25 | 5.85 | 5.2 | 4.05 | 2.8 |
| 4 | 1.9 | 2.4 | 2.72 | 4.25 | 4.2 | 7.55 | 7.45 | 6.2 | 5.9 | 5.2 | 4.2 | 2.8 |
| 5 | 1.9 | 2.4 | 2.82 | 4.2 | 4.25 | 7.2 | 7.6 | 6.3 | 5.9 | 5.1 | 4.5 | 2.8 |
| 6 | 1.9 | 2.2 | 2.5 | 4.2 | 4.25 | 7.45 | 7.15 | 6.95 | 5.6 | 5.25 | 4.5 | 2.8 |
| 7 | 1.95 | 2.1 | 2.45 | 4.2 | 4.25 | 7.5 | 7.15 | 7.3 | 5.6 | 5.1 | 4.5 | 2.8 |
| 8 | 1.95 | 2.1 | 2.45 | 4.2 | 4.25 | 8.7 | 7.3 | 7.35 | 5.75 | 4.65 | 4.5 | 2.8 |
| 9 | 2.0 | 2.1 | 2.42 | 4.2 | 4.25 | 7.75 | 7.45 | 7.5 | 5.7 | 4.5 | 4.5 | 2.9 |
| 10 | 2.05 | 2.1 | 2.4 | 4.25 | 4.25 | 7.5 | 7.8 | 7.55 | 5.7 | 4.5 | 4.5 | 2.8 |
| 11 | 2.05 | 2.1 | 2.28 | 4.3 | 4.25 | 7.0 | 8.05 | 7.6 | 5.6 | 4.4 | 4.4 | 2.9 |
| 12 | 2.05 | 3.55 | 2.32 | 4.3 | 4.3 | 6.7 | 6.25 | 7.95 | 5.5 | 4.4 | 4.4 | 2.95 |
| 13 | 2.05 | 3.1 | 2.35 | 4.3 | 4.3 | 6.45 | 6.6 | 6.75 | 5.5 | 4.35 | 4.4 | 2.95 |
| 14 | 2.05 | 5.6 | 2.35 | 4.3 | 4.3 | 6.55 | 6.5 | 6.2 | 5.5 | 4.3 | 4.4 | 2.95 |
| 15 | 2.05 | 3.3 | 2.35 | 4.25 | 5.6 | 6.7 | 6.95 | 6.1 | 5.45 | 4.3 | 4.4 | 2.95 |
| 16 | 2.05 | 2.9 | 2.6 | 4.25 | 9.0 | 6.35 | 6.5 | 5.95 | 5.5 | 4.3 | 4.4 | 2.95 |
| 17 | 2.05 | 2.58 | 2.65 | 4.25 | 6.7 | 7.65 | 6.25 | 7.9 | 5.5 | 4.3 | 4.4 | 2.95 |
| 18 | 2.05 | 2.55 | 2.55 | 4.25 | 6.2 | 8.8 | 6.25 | 7.55 | 5.4 | 4.3 | 4.4 | 2.95 |
| 19 | 2.05 | 2.5 | 2.5 | 4.25 | 5.65 | 9.0 | 6.3 | 7.55 | 5.4 | 4.3 | 4.4 | 4.0 |
| 20 | 2.05 | 4.1 | 2.45 | 4.3 | 5.35 | 8.45 | 7.75 | 7.4 | 5.35 | 4.3 | 4.4 | 4.0 |
| 21 | 2.05 | 4.95 | 2.45 | 4.3 | 5.85 | 7.75 | 7.45 | 7.4 | 5.3 | 4.25 | 4.4 | 4.0 |
| 22 | 2.05 | 4.35 | 2.45 | 4.3 | 9.9 | 7.45 | 7.25 | 7.3 | 5.3 | 4.2 | 4.4 | 4.0 |
| 23 | 2.05 | 4.25 | 2.4 | 4.3 | 7.85 | 7.1 | 7.05 | 7.3 | 5.3 | 4.2 | 4.4 | 4.2 |
| 24 | 2.05 | 3.95 | 2.4 | 4.3 | 9.65 | 6.5 | 6.9 | 7.3 | 5.3 | 4.3 | 4.4 | 4.4 |
| 25 | 2.05 | 3.75 | 2.35 | 4.3 | 8.2 | 6.7 | 6.65 | 7.2 | 5.2 | 4.6 | 4.4 | 4.3 |
| 26 | 2.05 | 2.55 | 2.35 | 4.3 | 7.5 | 6.65 | 6.5 | 7.05 | 5.1 | 4.55 | 4.25 | 4.2 |
| 27 | 2.05 | 2.35 | 2.35 | 4.25 | 6.95 | 6.7 | 6.75 | 6.5 | 5.0 | 4.5 | 4.0 | 4.1 |
| 28 | 2.05 | 2.3 | 2.35 | 4.2 | 6.4 | 7.85 | 6.65 | 6.7 | 5.0 | 4.45 | 4.0 | 4.1 |
| 29 | 2.05 | 2.22 | 2.3 | 4.2 | 6.2 | 7.55 | 6.65 | 6.5 | 4.9 | 4.45 | 3.95 | 4.05 |
| 30 | 2.05 | 2.12 | 2.3 | 4.2 | ...... | 7.3 | 6.25 | 6.4 | 4.9 | 4.4 | 3.9 | 4.05 |
| 31 | 2.05 | ...... | 2.3 | 4.2 | ...... | 6.95 | ...... | 6.25 | ...... | 4.25 | 3.9 | ...... |
| **1904-5.** | | | | | | | | | | | | |
| 1 | 4.0 | 4.1 | 4.3 | 4.95 | 5.2 | 5.25 | 6.15 | 5.95 | 5.15 | 4.1 | 4.1 | 2.8 |
| 2 | 4.0 | 4.2 | 4.3 | 4.8 | 5.2 | 5.25 | 5.95 | 5.9 | 5.1 | 4.1 | 4.1 | 2.8 |
| 3 | 4.0 | 4.1 | 4.2 | 4.75 | 5.2 | 5.25 | 5.95 | 5.8 | 5.05 | 4.45 | 4.1 | 2.8 |
| 4 | 4.0 | 4.1 | 4.1 | 4.7 | 5.2 | 5.25 | 5.9 | 5.8 | 5.05 | 4.8 | 4.1 | 2.8 |
| 5 | 4.0 | 4.1 | 4.1 | 4.65 | 5.15 | 5.25 | 5.9 | 5.65 | 5.0 | 4.6 | 4.1 | 2.85 |
| 6 | 4.0 | 4.1 | 4.1 | 4.6 | 5.05 | 5.25 | 6.0 | 5.55 | 5.0 | 4.4 | 4.1 | 2.85 |
| 7 | 4.1 | 4.1 | 4.1 | 4.6 | 4.85 | 5.25 | 6.1 | 5.5 | 5.0 | 4.25 | 4.1 | 2.85 |
| 8 | 4.1 | 4.1 | 4.1 | 4.55 | 4.85 | 5.25 | 6.1 | 5.5 | 4.9 | 4.1 | 4.0 | 2.85 |
| 9 | 4.1 | 4.1 | 4.1 | 4.55 | 4.75 | 5.2 | 6.1 | 5.5 | 4.85 | 4.1 | 3.9 | 2.85 |
| 10 | 4.2 | 4.1 | 4.1 | 4.55 | 4.8 | 5.2 | 6.2 | 5.45 | 4.75 | 4.0 | 3.8 | 2.85 |

[a] New gage installed on this date with datum 2 feet below that of the old gage.

*Daily gage height, in feet, of Susan River near Susanville, Cal., for 190[illegible]*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1904-5. | | | | | | | | | | |
| 11 | 4.56 | 4.1 | 4.05 | 4.55 | 4.7 | 5.2 | 6.1 | 5.4 | 4.7 | 4.0 |
| 12 | 4.4 | 4.1 | 4.05 | 4.6 | 4.65 | 5.4 | 6.1 | 5.4 | 4.7 | 4.1 |
| 13 | 4.3 | 4.1 | 4.1 | 4.65 | 4.55 | 5.9 | 6.1 | 5.35 | 4.65 | [illegible] |
| 14 | 4.3 | 4.1 | 4.1 | 4.7 | 4.5 | 5.9 | 6.1 | 5.3 | 4.65 | 4.2 |
| 15 | 4.2 | 4.1 | 4.1 | 4.7 | 4.45 | 6.05 | 6.1 | 5.3 | 4.6 | 4.2 |
| 16 | 4.25 | 4.2 | 4.1 | 4.7 | 4.45 | 6.1 | 6.1 | 5.4 | 4.5 | 4.2 |
| 17 | 4.25 | 4.2 | 4.05 | 4.7 | 4.5 | 6.05 | 6.05 | 5.4 | 4.5 | 4.0 |
| 18 | 4.2 | 4.15 | 4.05 | 4.65 | 4.55 | 6.0 | 6.05 | 5.4 | 4.4 | 4.0 |
| 19 | 4.2 | 4.15 | 4.0 | 4.65 | 5.05 | 6.6 | 6.05 | 5.4 | 4.4 | 4.1 |
| 20 | 4.15 | 4.15 | 4.0 | 4.65 | 5.35 | 6.25 | 5.95 | 5.4 | 4.4 | 4.05 |
| 21 | 4.15 | 4.1 | 4.0 | 4.65 | 5.35 | 6.45 | 5.8 | 5.4 | 4.3 | 3.9 |
| 22 | 4.1 | 4.1 | 4.0 | 4.8 | 5.25 | 6.15 | 5.8 | 5.4 | 4.3 | 3.9 |
| 23 | 4.1 | 4.1 | 4.05 | 5.5 | 5.1 | 6.1 | 5.8 | 5.35 | 4.25 | 3.85 |
| 24 | 4.1 | 4.1 | 4.05 | 5.4 | 5.1 | 6.05 | 5.85 | 5.35 | 4.2 | 3.85 |
| 25 | 4.1 | 4.1 | 4.05 | 5.2 | 5.2 | 5.85 | 5.9 | 5.3 | 4.2 | 3.85 |
| 26 | 4.1 | 4.1 | 4.1 | 4.95 | 5.2 | 6.9 | 6.0 | 5.3 | 4.2 | 3.85 |
| 27 | 4.1 | 4.25 | 4.1 | 4.9 | 5.25 | 6.3 | 6.0 | 5.3 | 4.2 | 3.8 |
| 28 | 4.1 | 4.2 | 4.1 | 4.9 | 5.25 | 6.1 | 6.0 | 5.25 | 4.2 | 3.8 |
| 29 | 4.1 | 4.2 | 4.1 | 4.85 | ....... | 6.0 | 6.0 | 5.25 | 4.15 | 3.75 |
| 30 | 4.1 | 4.2 | 7.6 | 4.8 | ....... | 6.1 | 6.0 | 5.2 | 4.15 | 3.75 |
| 31 | 4.1 | ....... | 5.45 | 4.8 | ....... | 6.0 | ....... | 5.2 | ....... | 4.1 |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. |
|---|---|---|---|---|---|---|
| 1905. | | | | 1905. | | |
| 1 | 3.8 | 4.0 | 4.0 | 16 | 3.9 | [illegible] |
| 2 | 3.8 | 4.0 | 4.0 | 17 | 4.0 | [illegible] |
| 3 | 3.9 | 4.0 | 4.0 | 18 | 4.05 | [illegible] |
| 4 | 3.95 | 4.0 | 4.0 | 19 | 4.0 | [illegible] |
| 5 | 3.95 | 4.0 | 4.0 | 20 | 4.0 | [illegible] |
| 6 | 3.95 | 4.0 | 4.0 | 21 | 4.0 | 4.0 |
| 7 | 4.0 | 4.0 | 4.0 | 22 | 4.0 | [illegible] |
| 8 | 3.95 | 4.0 | 4.0 | 23 | 4.0 | [illegible] |
| 9 | 3.9 | 4.0 | 4.0 | 24 | 4.0 | [illegible] |
| 10 | 3.9 | 4.0 | 4.0 | 25 | 4.0 | 4.1 |
| 11 | 3.9 | 4.0 | 4.0 | 26 | 4.0 | 4.1 |
| 12 | 3.9 | 4.0 | 4.0 | 27 | 4.0 | [illegible] |
| 13 | 3.9 | 4.0 | 4.0 | 28 | 4.0 | [illegible] |
| 14 | 3.9 | 4.0 | 4.0 | 29 | 4.0 | [illegible] |
| 15 | 3.9 | 4.0 | 4.0 | 30 | 4.0 | 4.0 |
| | | | | 31 | 4.0 | ....... |

*Rating tables for Susan River near Susanville, Cal.*

**January 1, 19[illegible], to December 31, 19[illegible].**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 2.40 | 11 | 3.60 | 90 | 4.80 | 470 | 6.00 | 950 |
| 2.60 | 15 | 3.80 | 134 | 5.00 | 550 | 6.20 | 1,030 |
| 2.80 | 22 | 4.00 | 180 | 5.20 | 630 | 6.40 | 1,110 |
| 3.00 | 30 | 4.20 | 248 | 5.40 | 710 | 6.60 | 1,190 |
| 3.20 | 44 | 4.40 | 316 | 5.60 | 790 | 6.80 | 1,270 |
| 3.40 | 60 | 4.60 | 390 | 5.80 | 870 | 7.00 | 1,350 |

*Rating tables for Susan River near Susanville, Cal.*—Contd.

January 1, 1903, to December 31, 1904.

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 3.60 | 6 | 5.00 | 92 | 6.40 | 350 | 7.80 | 900 |
| 3.70 | 8 | 5.10 | 104 | 6.50 | 375 | 7.90 | 940 |
| 3.80 | 10 | 5.20 | 116 | 6.60 | 400 | 8.00 | 980 |
| 3.90 | 13 | 5.30 | 128 | 6.70 | 425 | 8.10 | [illegible] |
| 4.00 | 16 | 5.40 | 142 | 6.80 | 450 | 8.20 | 1,040 |
| 4.10 | 20 | 5.50 | 155 | 6.90 | 480 | 8.30 | 1,120 |
| 4.20 | 24 | 5.60 | 172 | 7.00 | 510 | 8.40 | 1,200 |
| 4.30 | 30 | 5.70 | 190 | 7.10 | 540 | 8.50 | 1,300 |
| 4.40 | 35 | 5.80 | 210 | 7.20 | 575 | 8.60 | 1,400 |
| 4.50 | 42 | 5.90 | 230 | 7.30 | 610 | 8.70 | 1,500 |
| 4.60 | 50 | 6.00 | 250 | 7.40 | 645 | 8.80 | 1,600 |
| 4.70 | 60 | 6.10 | 275 | 7.50 | 680 | 8.90 | 1,700 |
| 4.80 | 70 | 6.20 | 300 | 7.60 | 725 | | |
| 4.90 | 80 | 6.30 | 325 | 7.70 | 760 | | |

NOTE.—The above table is applicable only to open channel. It is based on 6 discharge measurements made during 1903 and 1904. It is fairly well defined between gage heights 4 feet and 7.50 feet. To make this table applicable to 1902, 2 feet should be added to each observed gage height.

January 1 to December 31, 1905.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3.75 | 7 | 4.60 | 60 | 5.50 | 168 | 6.40 | 357 |
| 3.80 | 9 | 4.70 | 68 | 5.60 | 185 | 6.50 | 382 |
| 3.90 | 13 | 4.80 | 77 | 5.70 | 203 | 6.60 | 410 |
| 4.00 | 18 | 4.90 | 87 | 5.80 | 222 | 6.70 | 440 |
| 4.10 | 24 | 5.00 | 98 | 5.90 | 242 | 6.80 | 471 |
| 4.20 | 30 | 5.10 | 110 | 6.00 | 262 | 6.90 | 503 |
| 4.30 | 37 | 5.20 | 123 | 6.10 | 284 | | |
| 4.40 | 44 | 5.30 | 137 | 6.20 | 307 | | |
| 4.50 | 52 | 5.40 | 152 | 6.30 | 331 | | |

NOTE.—The above table is applicable only to open channel. It is based on 12 discharge measurements made during 1904-5 and is well defined.

*Daily gage height, in feet, of Masten ditch near Susanville, Cal., for 1900-1901.*

| Day. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|
| 1900. | | | | | | | |
| 1 | | 0.75 | 0.5 | 0.55 | 0.75 | 0.6 | 0.6 |
| 2 | | .75 | .5 | .5 | .8 | .6 | .5 |
| 3 | | .75 | .5 | .6 | 1.0 | .6 | .5 |
| 4 | | .75 | .5 | .6 | .85 | .6 | .45 |
| 5 | | .75 | .45 | .6 | .9 | .6 | .45 |
| 6 | | .7 | .55 | .6 | .85 | .6 | .4 |
| 7 | | .65 | .55 | .6 | .8 | .55 | .4 |
| 8 | | .6 | .5 | .65 | .75 | .55 | .4 |
| 9 | | .6 | .5 | .65 | .75 | .55 | .4 |
| 10 | | .65 | .5 | .65 | .7 | .55 | .4 |
| 11 | | .65 | .5 | .7 | .7 | .55 | .4 |
| 12 | | .65 | .5 | .7 | .7 | .55 | .4 |
| 13 | | .65 | .5 | .8 | .7 | .5 | .4 |
| 14 | | .65 | .5 | .8 | .65 | .5 | .4 |
| 15 | | .65 | .5 | .75 | .6 | .5 | .4 |
| 16 | | .65 | .5 | .75 | .6 | .6 | .4 |
| 17 | | .65 | .45 | .75 | .6 | .6 | .5 |
| 18 | | .65 | .45 | .75 | .6 | .6 | .5 |
| 19 | | .65 | .45 | .75 | .8 | .6 | .6 |
| 20 | | .65 | .6 | .75 | .9 | .6 | .9 |
| 21 | | .65 | .6 | .75 | .7 | .9 | .9 |
| 22 | | .6 | .55 | .75 | .0 | .7 | .8 |
| 23 | | .6 | .55 | .8 | .0 | .7 | .6 |
| 24 | | .55 | .55 | .8 | .0 | .6 | .6 |
| 25 | 0.3 | .55 | .55 | .85 | .0 | .7 | .6 |
| 26 | .65 | .55 | .5 | .85 | .7 | .6 | .6 |
| 27 | .65 | .55 | .5 | .75 | .7 | .6 | .4 |
| 28 | .55 | .55 | .5 | .75 | .65 | .6 | |
| 29 | .55 | .55 | .5 | .75 | .65 | .6 | |
| 30 | .8 | .55 | .5 | .75 | .65 | .6 | |
| 31 | | .55 | .55 | | .6 | | |

*Daily gage height, in feet, of Masten ditch near Susanville, Cal., for 1900–1901*—Cond.

| Day. | July. | Aug. | Sept. | Oct. | Nov. | Day. | July. | Aug. | Sept. | Oct. | Nov. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1901 | | | | | | 1901 | | | | | |
| 1 | | 0.8 | 0.8 | 0.90 | 0.8 | 16 | | 1.1 | 0.9 | [illegible] | |
| 2 | | .8 | .75 | 1.05 | .8 | 17 | | 1.1 | [illegible] | [illegible] | |
| 3 | | .8 | .85 | 1.0 | .8 | 18 | | 1.1 | [illegible] | [illegible] | |
| 4 | | .8 | .85 | .8 | .7 | 19 | | 1.1 | [illegible] | [illegible] | |
| 5 | | .8 | .8 | .8 | .7 | 20 | | 1.1 | [illegible] | [illegible] | |
| 6 | | .9 | .8 | .8 | .7 | 21 | | 1.1 | [illegible] | [illegible] | |
| 7 | | .9 | .8 | .8 | .7 | 22 | | .8 | 1.0 | [illegible] | |
| 8 | | .9 | .8 | .8 | .7 | 23 | | .8 | .95 | [illegible] | |
| 9 | | .8 | .85 | .8 | .7 | 24 | | .8 | .95 | [illegible] | |
| 10 | | .7 | .85 | .8 | .7 | 25 | | .8 | .95 | [illegible] | |
| 11 | | 1.1 | .9 | .8 | .8 | 26 | 1.1 | .8 | .9 | [illegible] | |
| 12 | | 1.1 | .9 | .8 | .8 | 27 | .8 | .8 | .9 | [illegible] | |
| 13 | | 1.1 | .9 | .8 | .8 | 28 | .6 | .8 | .9 | [illegible] | |
| 14 | | 1.1 | .9 | .8 | .8 | 29 | .4 | .8 | .9 | [illegible] | [illegible] |
| 15 | | 1.1 | .85 | .8 | .8 | 30 | .4 | .8 | .9 | [illegible] | [illegible] |
| | | | | | | 31 | .4 | .8 | | [illegible] | |

*Monthly discharge of Susan River near Susanville, Cal., for 1900–1901 and 1903–[illegible]*

[Drainage area, 256 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1900** | | | | | | |
| June | | | 31 | 0.121 | 0.14 | [illegible] |
| July | 18 | 11 | 13 | .051 | .06 | |
| August | 12 | 10 | 11 | .043 | .05 | |
| September | 11 | 10 | 11 | .043 | .05 | [illegible] |
| **1900–1901** | | | | | | |
| October | 38 | 11 | 17 | .066 | .08 | [illegible] |
| November | 390 | 15 | 47 | .184 | .21 | [illegible] |
| December | 470 | 26 | 60 | .234 | .25 | [illegible] |
| January | 52 | 36 | 43 | .168 | .19 | [illegible] |
| February | 1,070 | 36 | 308 | 1.20 | 1.25 | 17[illegible] |
| March | 770 | 197 | 363 | 1.42 | 1.64 | [illegible] |
| April | 730 | 134 | 371 | 1.45 | 1.62 | [illegible] |
| May | 590 | 168 | 420 | 1.64 | 1.89 | 25.[illegible] |
| June | 156 | 15 | 56 | .219 | .24 | [illegible] |
| July | 24 | 9 | 18 | .070 | .08 | 1.[illegible] |
| August | 13 | 5 | 10 | .049 | .06 | [illegible] |
| September | 9 | 4 | 6 | .023 | .03 | [illegible] |
| The year | 1,070 | 4 | 143 | .559 | 7.54 | 103.[illegible] |
| **1901** | | | | | | |
| October | 16 | 7 | 10 | .049 | .06 | [illegible] |
| November | 101 | 10 | 19 | .074 | .08 | 1.[illegible] |
| December | 470 | 11 | 61 | .024 | .03 | 1.[illegible] |
| **1903** | | | | | | |
| January | 388 | 36 | 90 | .35 | .40 | [illegible] |
| March | 1,400 | 36 | 205 | .80 | .92 | 12.[illegible] |
| April | 620 | 288 | 372 | 1.45 | 1.62 | [illegible] |
| May | 445 | 122 | 266 | 1.04 | 1.20 | 16.[illegible] |
| June | 116 | 20 | 63 | .25 | .28 | 3.[illegible] |
| July | 30 | 6 | 11 | .04 | .05 | [illegible] |
| August | 8 | 6 | 7 | .03 | .03 | [illegible] |
| September | 12 | 8 | 11 | .04 | .05 | [illegible] |
| The period | | | | | | 62.[illegible] |

*Monthly discharge of Susan River near Susanville, Cal., for 1900–1901 and 1903–1905*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1903–4.** | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July | 116 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | 1,750 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| **1904–5.** | | | | | | |
| October | 46 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | .30 | [illegible] | [illegible] |
| February | 144 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August | 24 | [illegible] | [illegible] | [illegible] | [illegible] | 744 |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 732 |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | 4.54 | [illegible] |
| **1905.** | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | .070 | [illegible] |
| November | 24 | [illegible] | [illegible] | [illegible] | [illegible] | 1,131 |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## WILLOW CREEK AT MERRILLVILLE, CAL.

The gaging station at Merrillville was located near the head of the creek, at the old bridge 100 feet above the present wagon bridge, on the road from Merrillville to Eagle Lake. It was established June 18, 1904, and was discontinued December 31, 1905.

The gage was a vertical staff fastened to the left end of the bridge. The channel is straight above and below the bridge for a distance of 100 feet. The banks are low, but as there is very little fluctuation in the discharge of the creek, they are not subject to overflow. The bed of the stream is composed of gravel and is comparatively permanent.

Discharge measurements were made from the bridge.

*Discharge measurements of Willow Creek at Merrillville, Cal., in 1904.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-feet.* |
| June 18 | S. G. Bennett | 1.00 | [illegible] |
| July 17 | James Branham | .95 | 14.[illegible] |
| Aug. 29 | ....do | 1.06 | 17.9 |
| Oct. 25 | Toler and Clapp | 1.07 | 19.3 |

*Daily gage height, in feet, of Willow Creek at Merrillville, Cal., for 1904–5.*

| Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1904. | | | | 1904. | | | |
| 1 | 1.0 | 1.0 | 1.0 | 16 | 1.1 | 1.0 | 1.05 |
| 2 | 1.0 | 1.0 | 1.1 | 17 | 1.0 | 1.05 | 1.05 |
| 3 | 1.0 | 1.05 | 1.1 | 18 | 1.0 | 1.0 | 1.05 |
| 4 | 1.0 | 1.0 | 1.05 | 19 | 1.0 | 1.0 | 1.0 |
| 5 | 1.0 | 1.0 | 1.05 | 20 | 1.0 | 1.0 | 1.0 |
| 6 | 1.05 | 1.0 | 1.05 | 21 | 1.05 | 1.0 | 1.[illegible] |
| 7 | 1.0 | .95 | 1.1 | 22 | 1.0 | 1.0 | 1.[illegible] |
| 8 | 1.0 | 1.05 | 1.05 | 23 | 1.0 | 1.0 | 1.[illegible] |
| 9 | 1.0 | 1.05 | 1.05 | 24 | 1.0 | 1.0 | 1.[illegible] |
| 10 | .95 | 1.0 | 1.1 | 25 | 1.0 | 1.05 | 1.1 |
| 11 | 1.1 | 1.0 | 1.05 | 26 | 1.0 | 1.0 | 1.05 |
| 12 | 1.15 | 1.0 | 1.0 | 27 | 1.0 | 1.0 | 1.[illegible] |
| 13 | 1.2 | 1.0 | 1.0 | 28 | 1.0 | 1.0 | 1.[illegible] |
| 14 | 1.1 | 1.0 | 1.05 | 29 | 1.05 | 1.0 | 1.[illegible] |
| 15 | 1.1 | 1.0 | 1.05 | 30 | 1.0 | 1.05 | 1.0 |
| | | | | 31 | 1.0 | 1.0 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 1 | 1.05 | 1.1 | 1.1 | 1.1 | 1.1 | 0.95 | 1.1 | 0.9 | 0.95 | 0.9 | 0.95 | 1.[illegible] |
| 2 | 1.05 | 1.1 | 1.1 | 1.05 | 1.1 | 1.0 | 1.05 | .9 | .95 | .9 | .95 | 1.[illegible] |
| 3 | 1.05 | 1.1 | 1.05 | 1.0 | 1.1 | 1.0 | 1.0 | .95 | .95 | .9 | .95 | 1.[illegible] |
| 4 | 1.05 | 1.1 | 1.05 | 1.0 | 1.05 | 1.0 | 1.0 | .95 | .95 | .9 | .95 | 1.[illegible] |
| 5 | 1.05 | 1.1 | 1.05 | 1.0 | 1.1 | .95 | 1.0 | .95 | .95 | .9 | .95 | 1.[illegible] |
| 6 | 1.1 | 1.05 | 1.05 | 1.0 | 1.05 | .95 | 1.0 | .95 | .95 | .9 | .95 | 1.0 |
| 7 | 1.1 | 1.1 | 1.05 | 1.0 | 1.0 | 1.0 | 1.0 | .95 | .95 | .9 | .95 | 1.[illegible] |
| 8 | 1.05 | 1.05 | 1.05 | 1.0 | 1.0 | 1.05 | 1.0 | .95 | 1.0 | .9 | .95 | 1.[illegible] |
| 9 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | .95 | 1.0 | .9 | 1.0 | 1.[illegible] |
| 10 | 1.1 | 1.1 | 1.05 | 1.0 | 1.0 | 1.0 | .95 | 1.0 | .95 | .95 | 1.0 | 1.0 |
| 11 | 1.05 | 1.1 | 1.05 | 1.0 | 1.0 | 1.0 | .95 | 1.05 | .95 | .95 | 1.0 | 1.0 |
| 12 | 1.05 | 1.1 | 1.05 | 1.0 | 1.0 | 1.0 | .95 | 1.1 | .95 | 1.05 | 1.0 | 1.0 |
| 13 | 1.05 | 1.1 | 1.1 | 1.0 | 1.0 | 1.05 | 1.0 | 1.05 | .95 | 1.05 | 1.0 | 1.0 |
| 14 | 1.1 | 1.1 | 1.1 | 1.05 | 1.0 | .95 | 1.0 | 1.0 | .95 | 1.0 | 1.0 | 1.0 |
| 15 | 1.2 | 1.1 | 1.05 | 1.05 | .95 | 1.05 | 1.0 | .95 | .95 | 1.0 | 1.0 | 1.0 |
| 16 | 1.1 | 1.1 | 1.05 | 1.05 | 1.0 | 1.1 | 1.0 | .9 | .95 | 1.0 | 1.0 | 1.0 |
| 17 | 1.05 | 1.05 | 1.05 | 1.05 | 1.0 | 1.1 | 1.0 | .9 | .95 | .95 | 1.0 | 1.0[illegible] |
| 18 | 1.05 | 1.1 | 1.05 | 1.05 | 1.0 | 1.05 | 1.0 | .9 | .95 | .95 | 1.0 | 1.0[illegible] |
| 19 | 1.05 | 1.1 | 1.05 | 1.05 | 1.25 | 1.1 | 1.0 | .9 | .95 | .95 | 1.0 | 1.[illegible] |
| 20 | 1.05 | 1.1 | 1.05 | 1.0 | 1.15 | 1.05 | 1.0 | .9 | .95 | .95 | 1.0 | 1.0[illegible] |
| 21 | 1.05 | 1.1 | 1.05 | 1.05 | 1.05 | 1.05 | 1.0 | .9 | .95 | .95 | 1.0 | 1.0[illegible] |
| 22 | 1.05 | 1.1 | 1.05 | 1.1 | 1.05 | 1.05 | 1.0 | .95 | .95 | .95 | 1.0 | 1.0[illegible] |
| 23 | 1.05 | 1.05 | 1.1 | 1.1 | 1.05 | 1.05 | .9 | .95 | .95 | .95 | 1.0 | 1.0[illegible] |
| 24 | 1.05 | 1.05 | 1.1 | 1.1 | 1.0 | 1.0 | .9 | .95 | .95 | .95 | 1.0 | 1.0[illegible] |
| 25 | 1.05 | 1.05 | 1.05 | 1.05 | 1.0 | 1.0 | .95 | .95 | .95 | .95 | 1.0 | 1.[illegible] |
| 26 | 1.05 | 1.05 | 1.0 | 1.0 | 1.05 | 1.1 | .95 | 1.0 | .95 | .95 | 1.0 | 1.0[illegible] |
| 27 | 1.1 | 1.1 | 1.05 | 1.0 | 1.0 | 1.1 | .95 | 1.0 | .95 | .95 | 1.0 | 1.1 |
| 28 | 1.05 | 1.1 | 1.05 | 1.0 | 1.0 | 1.0 | .95 | 1.0 | .95 | .95 | 1.0 | 1.1[illegible] |
| 29 | 1.1 | 1.1 | 1.2 | 1.0 | ...... | 1.1 | .9 | .95 | .95 | .95 | 1.0 | 1.2 |
| 30 | 1.1 | 1.1 | 1.7 | 1.0 | ...... | 1.05 | .9 | .95 | .9 | .95 | 1.0 | 1.1 |
| 31 | 1.1 | ...... | 1.2 | 1.0 | ...... | 1.05 | ...... | .95 | ...... | .95 | 1.0 | ...... |

*Daily gage height, in feet, of Willow Creek at Merrillville, Cal., [illegible]*

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|
| 1905. | | | | 1905. | | | |
| 1 | 1.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 1.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 1.1 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 1.1 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 1.1 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | 1.2 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | 1.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | 1.2 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | 1.2 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 1.2 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 1.2 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 1.2 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | | | | [illegible] | [illegible] | | [illegible] |

*Rating table for Willow Creek at Merrillville, Cal., from July [illegible], 1904, to December [illegible], 1905.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Second-feet.* | *Feet.* | *Second-feet.* | *Feet.* | *Second-feet.* | *Feet.* | *Second-feet.* |
| 0.90 | 16 | 1.10 | 20 | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.00 | 18 | | | | | | |

NOTE.—The above table is applicable only to open channel. It is based on four discharge measurements made during 1904. It is fairly well defined.

*Monthly discharge of Willow Creek at Merrillville, Cal., for 1904–5.*

| Month. | Discharge in second-feet. | | | Run-off total in acre-feet. |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1904.** | | | | |
| July | 22 | 17 | 19 | 1,168 |
| August | 19 | 17 | 18 | 1,107 |
| September | 20 | 18 | 19 | 1,131 |
| **1904–5.** | | | | |
| October | 22 | 19 | 19 | 1,168 |
| November | 20 | 19 | 20 | 1,190 |
| December | 50 | 19 | 20 | 1,230 |
| January | 20 | 18 | 18.5 | 1,138 |
| February | 23 | 17 | 18.8 | 1,044 |
| March | 20 | 17 | 18.6 | 1,144 |
| April | 20 | 16 | 17.6 | 1,047 |
| May | 20 | 16 | 17.1 | 1,051 |
| June | 18 | 16 | 17.0 | 1,012 |
| July | 19 | 16 | 16.9 | 1,039 |
| August | 18 | 17 | 17.7 | 1,088 |
| September | 22 | 18 | 18.7 | 1,113 |
| The year | 50 | 16 | 18.3 | 13,300 |
| **1905.** | | | | |
| October | 24 | 20 | 21.9 | 1,347 |
| November | 24 | 22 | 22.2 | 1,321 |
| December | 24 | 23 | 24.0 | 1,476 |

## WILLOW CREEK NEAR STANDISH, CAL.

This station, which was located at the bridge on the road from Susanville to Hot Springs, about 1½ miles above the junction of the creek with Susan River and about 4 miles west of north from Standish, was originally established June 4, 1901, discontinued December 31, 1901, reestablished January 1, 1905, and again discontinued December 31, 1905.

The gage was a staff fastened vertically to the left abutment of the bridge.

The channel is straight for 300 feet above and 250 feet below the station. The right bank is rather low and is subject to overflow at extreme high water; the left bank is high and not liable to overflow. The stream bed is sandy and liable to shift somewhat.

Discharge measurements were made from the bridge.

*Discharge measurements of Willow Creek near Standish, Cal., in 1901 and 1905.*

| Date | Hydrographer | Gage height | Discharge | Date | Hydrographer | Gage height | Discharge |
|---|---|---|---|---|---|---|---|
| 1901. | | Feet. | Sec.-ft. | 1905. | | Feet. | Sec.-ft. |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | | | | [illegible] | [illegible] | 4.0 | [illegible] |
| | | | | [illegible] | [illegible] | [illegible] | [illegible] |

*[illegible] Willow Creek near Standish, Cal., for 1901 and 1905.*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

STREAM [illegible]

*Daily gage height, in feet, of* [illegible]

| Day. | Oct. | Nov. | Dec. | Jan. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900-1901. | | | | | | | | | | | | |
| 11 | 2.9 | 2.6 | 2.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] |
| 12 | 2.3 | 2.6 | [illegible] | [illegible] | [illegible] | | | [illegible] | | | | |
| 13 | 2.3 | 2.6 | [illegible] | [illegible] | [illegible] | | [illegible] | | | | | |
| 14 | 2.3 | 2.7 | 4.6 | [illegible] | [illegible] | | [illegible] | [illegible] | | | | |
| 15 | 2.3 | 2.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 2.3 | 2.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 17 | 2.3 | 2.6 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | | | | |
| 18 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | | |
| 19 | 2.3 | 2.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 20 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | [illegible] | |
| 22 | 2.3 | 4.0 | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | | | |
| 23 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 24 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| 25 | 2.4 | 4.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 26 | 2.4 | 4.2 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | | |
| 27 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | | |
| 28 | 2.4 | 4.0 | [illegible] | [illegible] | | [illegible] | [illegible] | | | | | |
| 29 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | | | |
| 30 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | [illegible] |
| 31 | 2.4 | | [illegible] | [illegible] | [illegible] | [illegible] | | | | [illegible] | [illegible] | |

| Day. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|
| 1901. | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | |
| 7 | [illegible] | [illegible] | | [illegible] | | | [illegible] | |
| 8 | [illegible] | [illegible] | | [illegible] | | | | |
| 9 | [illegible] | [illegible] | | [illegible] | | [illegible] | | |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | | [illegible] | | | | |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| 14 | [illegible] | [illegible] | | [illegible] | | | | |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | | | | |

| Day. | Jan. | Feb. | Mar. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | | | |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] | | [illegible] | | |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | | | |
| 4 | [illegible] | | [illegible] | [illegible] | [illegible] | | | | [illegible] | | | |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | | |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | | |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | | |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | | |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | | | |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |

*Daily gage height, in feet, of Willow Creek near Standish, Cal., for 1900–1901 and 1905*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | | | | | | | |
| 21 | 6.0 | 7.8 | 5.2 | 4.0 | 4.1 | 4.0 | 6.0 | 4.5 | 4.8 | 4.5 | 4.8 | 4.0 |
| 22 | 7.6 | 7.8 | 5.2 | 4.0 | 4.1 | 4.0 | 5.0 | 4.6 | 4.8 | 4.5 | 4.6 | 5.0 |
| 23 | 7.8 | 7.0 | 5.0 | 4.0 | 4.0 | 4.0 | 5.0 | 4.2 | 4.8 | 5.0 | 4.6 | 5.0 |
| 24 | 6.0 | 6.2 | 4.8 | 4.0 | 4.0 | 4.0 | 4.8 | 4.0 | 4.6 | 5.1 | 4.5 | 5.2 |
| 25 | 6.0 | 6.0 | 4.6 | 4.0 | 4.0 | 4.0 | 4.1 | 4.0 | 4.5 | 5.2 | 4.4 | 5.0 |
| 26 | 5.8 | 6.3 | 5.3 | 4.0 | 4.0 | 6.2 | 4.0 | 4.2 | 5.0 | 5.2 | 4.8 | 5.2 |
| 27 | 5.6 | 5.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.2 | 6.0 | 5.1 | 4.8 | 5.3 |
| 28 | 5.6 | 5.0 | 5.0 | 4.0 | 3.8 | 4.0 | 4.0 | 4.2 | 5.8 | 5.5 | 5.0 | 5.3 |
| 29 | 5.7 | ...... | 5.0 | 4.0 | 3.8 | 4.0 | 4.0 | 4.2 | 5.8 | 5.2 | 5.0 | 5.3 |
| 30 | 5.0 | ...... | 5.0 | 4.0 | 3.8 | 3.6 | 4.0 | 4.3 | 5.0 | 5.0 | 5.0 | 5.3 |
| 31 | 5.6 | ...... | 5.5 | ...... | ...... | ...... | 4.0 | 4.2 | ...... | 5.0 | ...... | 5.3 |

*Rating table for Willow Creek near Standish, Cal., from Jan. 1 to Dec. 31, 1905.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Second-feet.* | *Feet.* | *Second-feet.* | *Feet.* | *Second-feet.* | *Feet.* | *Second-feet.* |
| 3.60 | 10 | 4.60 | 31 | 5.60 | 74 | 6.60 | 141 |
| 3.70 | 11 | 4.70 | 34 | 5.70 | 80 | 6.70 | 149 |
| 3.80 | 13 | 4.80 | 37 | 5.80 | 86 | 6.80 | 157 |
| 3.90 | 15 | 4.90 | 41 | 5.90 | 92 | 6.90 | 165 |
| 4.00 | 17 | 5.00 | 45 | 6.00 | 98 | 7.00 | 173 |
| 4.10 | 19 | 5.10 | 49 | 6.10 | 105 | 7.20 | 189 |
| 4.20 | 21 | 5.20 | 54 | 6.20 | 112 | 7.40 | 205 |
| 4.30 | 23 | 5.30 | 59 | 6.30 | 119 | 7.60 | 221 |
| 4.40 | 25 | 5.40 | 64 | 6.40 | 126 | 7.80 | 238 |
| 4.50 | 28 | 5.50 | 69 | 6.50 | 133 | | |

NOTE.—Table is based on five discharge measurements made during 1905 and is not well defined.

*Monthly discharge of Willow Creek near Standish, Cal., for 1905.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet.) |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| January | 238 | 31 | 80.4 | 4,944 |
| February | 238 | 31 | 89.4 | 4,965 |
| March | 69 | 17 | 33.5 | 2,060 |
| April | 69 | 17 | 22.9 | 1,363 |
| May | 21 | 13 | 17.0 | 1,045 |
| June | 112 | 10 | 21.1 | 1,256 |
| July | 96 | 0 | 46.2 | 2,841 |
| August | 31 | 17 | 19.6 | 1,206 |
| September | 96 | 17 | 41.0 | 2,440 |
| The period | ......... | ......... | ......... | 22,100 |
| October | 69 | 17 | 31.8 | 1,955 |
| November | 54 | 25 | 39.6 | 2,356 |
| December | 59 | 17 | 38.7 | 2,380 |

[illegible]

| Date. | Stream. | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| Apr. 18, 1899 | Susan River | [illegible] | [illegible] | [illegible] |
| Apr. 22, 1899 | do | [illegible] | [illegible] | [illegible] |
| June 4, 1899 | do | [illegible] | [illegible] | [illegible] |
| June 11, 1899 | do | [illegible] | [illegible] | [illegible] |
| Do | do | [illegible] | [illegible] | [illegible] |
| Apr. 18, 1899 | do | [illegible] | [illegible] | [illegible] |
| Apr. 22, 1899 | do | [illegible] | [illegible] | [illegible] |
| June 11, 1899 | do | [illegible] | [illegible] | [illegible] |
| Do | do | [illegible] | [illegible] | [illegible] |
| Apr. 4, 1899 | Susan River, North Branch | [illegible] | [illegible] | [illegible] |
| June 4, 1899 | do | [illegible] | [illegible] | [illegible] |
| Apr. 24, 1899 | Susan River, South Branch | [illegible] | [illegible] | [illegible] |
| June 4, 1899 | do | [illegible] | [illegible] | [illegible] |
| June 11, 1899 | Susan River, North and South branches | [illegible] | [illegible] | [illegible] |
| Apr. 18, 1899 | Willow Creek | [illegible] | [illegible] | [illegible] |
| Do | do | [illegible] | [illegible] | [illegible] |
| Apr. 22, 1899 | do | [illegible] | [illegible] | [illegible] |
| June 4, 1899 | do | [illegible] | [illegible] | [illegible] |
| Apr. 24, 1899 | do | [illegible] | [illegible] | [illegible] |
| June 4, 1899 | do | [illegible] | [illegible] | [illegible] |
| June 11, 1899 | do | [illegible] | [illegible] | [illegible] |
| Do | do | [illegible] | [illegible] | [illegible] |
| Jan. 7, 1904 | do | [illegible] | [illegible] | [illegible] |
| May 12, 1904 | do | [illegible] | [illegible] | |
| Aug. 16, 1904 | do | [illegible] | [illegible] | |
| Nov. 11, 1904 | do | [illegible] | [illegible] | [illegible] |
| Apr. 18, 1899 | [illegible] | [illegible] | | [illegible] |
| Apr. 22, 1899 | do | [illegible] | | [illegible] |
| June 4, 1899 | do | [illegible] | | [illegible] |
| June 11, 1899 | do | [illegible] | | [illegible] |

## PYRAMID AND [illegible] BASINS.

### [illegible]

Records of the [illegible] determine the [illegible] of further reg[illegible] following table [illegible] level, the gage [illegible] for 1907 and 19[illegible] to a datum 6,225.5 feet [illegible]

From 1889 [illegible] had a mean elevation [illegible] its highest point was [illegible] the floor of the gates has been [illegible] and that of the [illegible]

[The] following table summarizes the fluctuations of the [lake for the] [illegible] years as far as they have been recorded:

*[Table] showing fluctuation of Lake [Tahoe] from [illegible] to [illegible].*

| Year | High water: Date | High water: Height | Low water: Date | Low water: Height | [illegible] |
|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[The] lake was also low in January [illegible]. [Lower] earlier in year, no record.

[illegible] records for [illegible] to [illegible] were reported by W. H. Hall.

*[Gage] height[s] in feet [of] Lake Tahoe at Tahoe, [Cal.], [for] 1900–1912.*

| Year | [illegible] | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 8.42 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 8.42 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 8.42 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 8.41 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 8.41 | 7.81 |

a Estimated.

*Daily gage height, in feet, of Lake Tahoe at Tahoe, Cal., for 1900–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1900–1901.** | | | | | | | | | | | | |
| 16 | 5.88 | 5.94 | | | | | | | | | 8.41 | 7.81 |
| 17 | 5.87 | 5.99 | | | | 7.10 | | | | | 8.41 | 7.81 |
| 18 | 5.87 | 6.00 | | | | | | | | | 8.40 | 7.80 |
| 19 | 5.93 | 5.99 | | | 6.77 | | | | | | 8.40 | 7.79 |
| 20 | 5.93 | 6.00 | | 6.18 | | | | | | | 8.39 | 7.77 |
| 21 | 5.93 | 6.02 | | | | | | | | | 8.37 | 7.76 |
| 22 | 5.92 | 6.03 | | | | | | | | | 8.35 | 7.75 |
| 23 | 5.91 | 6.03 | | | | 7.10 | | | | | 8.32 | 7.74 |
| 24 | 5.91 | 6.02 | | | | | | | | | 8.29 | 7.79 |
| 25 | 5.90 | 6.01 | | | | | | | | | 8.26 | 7.78 |
| 26 | 5.89 | 6.02 | | | | | | | 8.31 | | 8.23 | 7.77 |
| 27 | 5.89 | 6.02 | | 6.18 | | | | | | 8.43 | 8.21 | 7.76 |
| 28 | 5.92 | 6.01 | | | 6.95 | | | | | 8.43 | 8.19 | 7.75 |
| 29 | 5.92 | 6.01 | | | | | | | | 8.43 | 8.17 | 7.74 |
| 30 | 5.91 | 6.00 | | | | 7.10 | 7.40 | | [a]8.33 | 8.43 | 8.15 | 7.73 |
| 31 | 5.91 | | [a]6.10 | | | | | 7.92 | | 8.43 | 8.13 | |
| **1901–2.** | | | | | | | | | | | | |
| 1 | | | | 7.30 | 7.08 | | [a]8.24 | | | 9.02 | 8.77 | 8.26 |
| 2 | | | | | | | | | | 9.02 | 8.77 | 8.25 |
| 3 | | | | | | | | | | 9.02 | 8.76 | 8.24 |
| 4 | | | | | | | | | 8.77 | 9.02 | 8.76 | 8.24 |
| 5 | | | | | 7.05 | | | | 8.79 | 9.02 | 8.75 | 8.23 |
| 6 | | | 7.36 | | | | | | 8.81 | 9.02 | 8.74 | 8.22 |
| 7 | | | 7.35 | 7.25 | | | | | 8.83 | 9.01 | 8.74 | 8.21 |
| 8 | | | | | | | | | 8.84 | | 8.73 | 8.30 |
| 9 | | | 7.33 | | | | | | 8.85 | | 8.72 | 8.28 |
| 10 | | | 7.32 | | | | | | 8.87 | | 8.71 | 8.27 |
| 11 | | | | | | | | | | | 8.70 | 8.26 |
| 12 | | 7.34 | | | | | | | | 8.97 | 8.69 | 8.25 |
| 13 | | | 7.30 | | | | | | | | 8.69 | 8.24 |
| 14 | | 7.33 | | | | | | | 8.97 | | 8.66 | 8.22 |
| 15 | | | 7.28 | 7.20 | | | | | 8.96 | | 8.64 | 8.28 |
| 16 | | | | | | 8.15 | | | 8.96 | 8.90 | 8.62 | 8.18 |
| 17 | | | | | | | | | 8.96 | | 8.60 | 8.16 |
| 18 | | 7.28 | | | 7.28 | | | | 8.97 | 8.90 | 8.57 | 8.12 |
| 19 | | | | | 7.28 | | | | 8.98 | 8.90 | 8.55 | 8.09 |
| 20 | | | | | | | | | 8.99 | 8.90 | 8.52 | 8.06 |
| 21 | | | | | | | | | 9.01 | 8.90 | 8.50 | 8.03 |
| 22 | | | | | 7.25 | | | | 9.02 | 8.90 | 8.48 | 8.01 |
| 23 | | | | | | | | | 9.02 | 8.90 | 8.46 | |
| 24 | | | | | | | | | | 8.90 | 8.44 | |
| 25 | | | | | | | | 8.50 | | 8.90 | 8.43 | |
| 26 | | | | | | | | 8.60 | | 8.88 | 8.42 | |
| 27 | | | | | | | | 8.61 | | 8.86 | 8.41 | 7.90 |
| 28 | | | | | 7.50 | | | 8.63 | | 8.84 | 8.40 | 7.88 |
| 29 | | | | | | | | | 9.02 | 8.82 | 8.39 | 7.86 |
| 30 | | 7.16 | | | | | [a]8.42 | 8.68 | | 8.81 | 8.38 | 7.83 |
| 31 | 7.50 | | 7.28 | 7.08 | | | | | | 8.79 | 8.37 | |
| **1902–3.** | | | | | | | | | | | | |
| 1 | 7.80 | 7.37 | 7.06 | [a]7.04 | [a]6.91 | | | 7.87 | | [a]8.88 | 8.70 | 8.25 |
| 2 | 7.78 | 7.35 | 7.03 | | | | 7.52 | 7.89 | | | 8.70 | 8.25 |
| 3 | 7.77 | 7.32 | 7.01 | | | | 7.54 | 7.91 | 8.50 | | 8.68 | 8.20 |
| 4 | 7.75 | 7.30 | 6.99 | | | | 7.56 | 7.93 | 8.48 | | 8.66 | 8.20 |
| 5 | 7.75 | 7.29 | 6.97 | | | | 7.60 | 7.96 | | 8.90 | 8.65 | 8.20 |
| 6 | 7.73 | 7.27 | | | | 7.30 | 7.63 | 7.99 | 8.53 | 8.90 | 8.64 | 8.18 |
| 7 | 7.71 | 7.26 | | | | 7.30 | 7.65 | 8.01 | 8.55 | 8.90 | 8.62 | 8.10 |
| 8 | 7.69 | 7.25 | | | | | | 8.03 | 8.57 | 8.90 | 8.60 | |
| 9 | 7.67 | 7.24 | | | | 7.32 | | 8.05 | 8.62 | 8.90 | 8.60 | |
| 10 | 7.65 | 7.24 | | | | 7.30 | | | | 8.90 | | |
| 11 | 7.64 | 7.24 | | | | | 7.71 | | 8.68 | 8.90 | | |
| 12 | 7.62 | | 7.20 | | | | 7.73 | | | 8.90 | 8.58 | |
| 13 | 7.60 | | 7.20 | | | | 7.73 | 8.17 | 8.72 | 8.90 | 8.57 | |
| 14 | 7.58 | 7.23 | | 6.88 | | | | | | 8.90 | 8.56 | |
| 15 | 7.56 | | | 6.87 | | | | 8.23 | | 8.90 | 8.52 | |
| 16 | 7.55 | | | 6.86 | | | | | | 8.90 | 8.50 | 7.90 |
| 17 | 7.53 | | | 6.85 | | | | | | 8.85 | | 7.90 |
| 18 | 7.51 | | | 6.83 | | 7.30 | | | 8.76 | 8.85 | | 7.90 |
| 19 | 7.49 | | | 6.82 | | 7.28 | | | 8.77 | 8.80 | | 7.90 |
| 20 | 7.47 | | | 6.81 | | 7.25 | | | 8.77 | 8.80 | 8.46 | |

[a] Estimated.

*Daily gage height, in feet, of Lake Tahoe at Tahoe, Cal., for 1900–1912—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1902–3.** | | | | | | | | | | | | |
| 21 | | | | 6.80 | | 7.23 | 7.77 | | | 8.80 | | |
| 22 | 7.48 | 7.27 | | | | 7.22 | 7.78 | 8.30 | 8.79 | 8.80 | 8.40 | 7.80 |
| 23 | | | | | | 7.21 | | | 8.80 | | 8.38 | 7.80 |
| 24 | | | | | | 7.20 | 7.80 | 8.30 | 8.82 | 8.77 | 8.35 | 7.80 |
| 25 | 7.50 | | | | | | | 8.30 | 8.82 | 8.76 | | 7.80 |
| 26 | 7.47 | 7.19 | | | | 7.23 | | | | 8.75 | 8.30 | 7.80 |
| 27 | 7.45 | 7.16 | | | | 7.28 | | | 8.86 | 8.73 | 8.30 | 7.75 |
| 28 | 7.44 | 7.14 | | | a 7.24 | | | | | 8.72 | 8.30 | 7.75 |
| 29 | 7.42 | 7.11 | | | | | 7.85 | 8.35 | | | 8.25 | 7.75 |
| 30 | 7.41 | 7.08 | | | | | 7.86 | 8.39 | | | 8.25 | |
| 31 | 7.39 | | | a 6.91 | | 7.45 | | 8.44 | | 8.70 | 8.25 | |
| **1903–4.** | | | | | | | | | | | | |
| 1 | a 7.74 | | 7.55 | 7.25 | 7.10 | | | 9.55 | | 10.38 | | |
| 2 | | 7.27 | | 7.30 | 7.10 | | 9.30 | 9.55 | 10.17 | 10.36 | | |
| 3 | | 7.25 | | 7.25 | 7.10 | 8.30 | | 9.55 | | 10.36 | 9.92 | |
| 4 | | | | | | 8.30 | | 9.55 | | 10.36 | 9.90 | 9.27 |
| 5 | | | 7.50 | | 7.10 | 8.30 | | 9.55 | | 10.35 | | 9.25 |
| 6 | | | | 7.25 | | | | 9.55 | 10.20 | 10.35 | 9.86 | 9.24 |
| 7 | | | | | | | | 9.55 | 10.20 | 10.35 | 9.86 | 9.22 |
| 8 | | | | 7.25 | | | | 9.55 | 10.22 | | 9.85 | 9.20 |
| 9 | | | | 7.25 | | | | 9.58 | 10.24 | 10.32 | 9.83 | 9.18 |
| 10 | | | 7.40 | 7.25 | | | 9.25 | 9.60 | 10.26 | 10.30 | | 9.15 |
| 11 | | | 7.40 | 7.20 | | | 9.25 | 9.63 | 10.30 | | 9.80 | 9.13 |
| 12 | | | 7.40 | 7.20 | | | 9.30 | 9.66 | 10.30 | | | 9.13 |
| 13 | 7.50 | | 7.40 | 7.25 | | | 9.30 | 9.70 | 10.32 | 10.25 | 9.76 | 9.10 |
| 14 | 7.50 | | 7.40 | 7.20 | | | | 9.73 | 10.34 | | 9.73 | 9.08 |
| 15 | 7.50 | 7.40 | 7.50 | 7.20 | | | | 9.77 | | | 9.70 | 9.07 |
| 16 | 7.45 | 7.40 | | 7.20 | 7.60 | | 9.35 | 9.80 | 10.35 | | | |
| 17 | 7.45 | 7.40 | 7.50 | 7.20 | 7.60 | | 9.40 | | 10.36 | 10.18 | | 9.04 |
| 18 | 7.40 | 7.40 | 7.40 | 7.20 | 7.60 | | 9.40 | | 10.38 | 10.15 | 9.68 | 9.00 |
| 19 | 7.40 | 7.40 | 7.40 | 7.20 | 7.60 | | 9.45 | | 10.38 | | | 8.98 |
| 20 | 7.40 | 7.40 | 7.35 | | 7.60 | | 9.50 | | | 10.10 | | 8.95 |
| 21 | 7.40 | 7.40 | 7.35 | 7.20 | | | 9.50 | | | | | |
| 22 | 7.40 | | 7.35 | | | | 9.55 | 9.90 | 10.40 | | | |
| 23 | 7.40 | 7.55 | | 7.15 | | | 9.55 | 9.95 | | | | |
| 24 | 7.35 | 7.60 | 7.30 | 7.15 | | | 9.60 | | | 10.09 | 9.50 | |
| 25 | 7.35 | 7.60 | 7.30 | | | | 9.60 | | 10.40 | 10.08 | | |
| 26 | 7.35 | 7.60 | 7.30 | 7.15 | | | 9.60 | | 10.36 | | | 8.85 |
| 27 | 7.35 | 7.60 | 7.30 | 7.15 | | | 9.55 | 10.03 | 10.38 | | | |
| 28 | 7.32 | 7.55 | 7.30 | 7.15 | | | 9.55 | 10.08 | | | | |
| 29 | 7.32 | 7.60 | 7.30 | 7.10 | | | 9.55 | | | | | |
| 30 | 7.30 | 7.55 | 7.35 | 7.10 | | 9.25 | 9.55 | | 10.38 | 9.95 | 9.37 | 8.76 |
| 31 | 7.30 | | | 7.10 | | 9.25 | | | | | 9.33 | |
| **1904–5.** | | | | | | | | | | | | |
| 1 | | | | 7.80 | | 7.75 | 7.90 | | 8.50 | 8.65 | 8.35 | 7.85 |
| 2 | 8.75 | | | 7.75 | | 7.75 | 7.90 | | 8.50 | 8.65 | 8.35 | 7.85 |
| 3 | 8.70 | 8.40 | | 7.75 | | 7.75 | 7.90 | | 8.55 | 8.60 | 8.30 | 7.85 |
| 4 | 8.72 | | | 7.75 | 7.70 | 7.70 | 7.90 | | 8.55 | 8.60 | 8.30 | 7.80 |
| 5 | 8.70 | | | 7.75 | 7.70 | 7.70 | 7.90 | | 8.55 | 8.60 | 8.30 | 7.80 |
| 6 | | | 7.80 | 7.75 | | 7.70 | 7.90 | | 8.55 | 8.60 | 8.30 | 7.80 |
| 7 | | 8.30 | | 7.75 | | | 7.90 | | 8.55 | 8.60 | 8.30 | 7.75 |
| 8 | | | | | | | 7.90 | | 8.55 | 8.60 | 8.30 | 7.75 |
| 9 | | | | | | 7.70 | | | 8.60 | 8.60 | 8.25 | 7.70 |
| 10 | | | 7.68 | | | 7.65 | | | 8.60 | 8.60 | 8.20 | 7.70 |
| 11 | | 8.20 | 7.68 | 7.70 | | 7.65 | | | 8.60 | 8.60 | 8.20 | 7.65 |
| 12 | 8.80 | | | 7.70 | | | | 8.30 | 8.60 | 8.60 | 8.20 | 7.65 |
| 13 | 8.80 | | 7.70 | | | | | 8.30 | 8.60 | 8.60 | 8.20 | 7.65 |
| 14 | 8.80 | | | 7.70 | | | 7.95 | 8.30 | 8.65 | 8.55 | 8.20 | |
| 15 | 8.78 | | | 7.65 | 7.75 | | 7.95 | 8.30 | 8.65 | 8.55 | 8.20 | |
| 16 | | 8.15 | | 7.65 | | | 7.95 | 8.30 | 8.65 | 8.55 | 8.15 | |
| 17 | 8.70 | | 7.68 | | | | | 8.30 | 8.65 | 8.50 | 8.15 | 7.57 |
| 18 | 8.65 | | 7.68 | 7.60 | 7.75 | | | 8.30 | 8.70 | 8.50 | 8.10 | |
| 19 | | 8.10 | | | | | 8.00 | 8.40 | 8.70 | 8.50 | 8.10 | 7.50 |
| 20 | | | | | | | 8.00 | 8.40 | 8.70 | 8.50 | 8.10 | 7.50 |
| 21 | 8.60 | | | | | | 8.00 | 8.40 | 8.70 | 8.45 | 8.05 | 7.50 |
| 22 | 8.60 | 8.05 | | | | | 8.00 | 8.40 | 8.70 | 8.45 | 8.05 | 7.45 |
| 23 | 8.60 | 8.05 | | 7.70 | | 7.70 | 8.00 | 8.45 | 8.70 | 8.40 | 8.00 | 7.45 |
| 24 | 8.55 | 8.00 | | 7.70 | | | 8.00 | 8.45 | 8.70 | 8.40 | 8.00 | |
| 25 | 8.50 | 8.00 | 7.60 | 7.70 | | | 8.00 | 8.45 | 8.70 | 8.40 | 8.00 | |

a Estimated.

*Daily gage height, in feet, of Lake Tahoe at Tahoe, Cal., for 1900–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 26 | 8.50 | 7.95 | | 7.70 | 7.75 | | 8.10 | 8.45 | 8.70 | 8.40 | 7.95 | |
| 27 | 8.50 | | | 7.65 | 7.75 | 7.85 | 8.15 | 8.45 | 8.70 | 8.40 | 7.95 | |
| 28 | 8.50 | | | 7.65 | 7.75 | | 8.15 | 8.50 | 8.65 | 8.40 | 7.95 | |
| 29 | 8.50 | | | | | | | 8.50 | 8.65 | 8.40 | 7.90 | |
| 30 | 8.45 | a 7.88 | | | | 7.90 | a 8.18 | 8.50 | 8.65 | 8.40 | 7.90 | |
| 31 | | | 7.80 | | | 7.90 | | 8.50 | | 8.40 | 7.90 | |
| **1905–6.** | | | | | | | | | | | | |
| 1 | 7.30 | 6.70 | | a 6.20 | | 7.20 | | 7.90 | 8.70 | 9.55 | 9.80 | 9.30 |
| 2 | 7.30 | 6.70 | | | | | | 7.90 | 8.75 | 9.55 | 9.80 | 9.30 |
| 3 | 7.30 | 6.70 | 6.40 | | 7.04 | | | 7.90 | | 9.60 | 9.80 | 9.30 |
| 4 | 7.30 | 6.70 | 6.40 | | 7.04 | | | 7.95 | | 9.60 | 9.75 | 9.30 |
| 5 | | | | 6.16 | 7.04 | 7.30 | | 7.95 | | 9.60 | 9.75 | 9.20 |
| 6 | | | | 6.16 | 7.02 | 7.30 | | 8.00 | | 9.70 | 9.75 | 9.20 |
| 7 | | | | | 7.02 | 7.30 | | 8.05 | | 9.70 | 9.75 | 9.20 |
| 8 | | 6.55 | | | 7.02 | 7.30 | | 8.10 | | 9.75 | 9.75 | |
| 9 | | 6.55 | | | 7.02 | 7.30 | | 8.10 | | 9.75 | 9.70 | |
| 10 | | 6.50 | | | 7.02 | 7.30 | | | | 9.80 | 9.70 | |
| 11 | | 6.50 | | | 7.02 | | | | | 9.80 | 9.70 | 9.10 |
| 12 | | 6.50 | 6.30 | | | | 7.70 | | | 9.80 | 9.70 | 9.10 |
| 13 | 7.05 | 6.50 | 6.30 | | | | 7.70 | | | 9.80 | 9.70 | 9.05 |
| 14 | | 6.40 | 6.30 | | | | 7.70 | | | 9.85 | 9.70 | 9.05 |
| 15 | | 6.40 | 6.30 | | | | 7.70 | | | 9.85 | 9.65 | 9.05 |
| 16 | | 6.40 | 6.30 | | 7.06 | | | | | 9.85 | 9.65 | 9.05 |
| 17 | | 6.40 | | | | | 7.70 | 8.30 | 9.10 | 9.85 | 9.65 | |
| 18 | | 6.40 | | | | | 7.70 | 8.30 | 9.15 | 9.85 | 9.60 | |
| 19 | | 6.40 | | | 7.00 | 7.50 | 7.70 | 8.30 | 9.20 | 9.85 | 9.60 | 8.90 |
| 20 | 6.90 | 6.40 | | 7.06 | 7.00 | | 7.70 | 8.30 | 9.25 | 9.85 | 9.60 | 8.88 |
| 21 | | 6.40 | | 7.06 | | | 7.70 | 8.40 | 9.25 | 9.87 | 9.60 | |
| 22 | | 6.40 | | 7.06 | | | | 8.40 | 9.30 | 9.87 | 9.60 | |
| 23 | 6.80 | 6.40 | 6.20 | 7.10 | | | | | 9.30 | 9.87 | 9.60 | |
| 24 | 6.80 | | | 7.10 | | | | | 9.35 | 9.87 | 9.50 | 8.75 |
| 25 | 6.80 | | | 7.10 | | | 7.75 | | 9.35 | 9.87 | 9.50 | 8.75 |
| 26 | 6.75 | | | 7.10 | | | 7.75 | | 9.40 | 9.87 | 9.40 | 8.75 |
| 27 | 6.75 | | | 7.10 | | | | | 9.45 | 9.87 | 9.40 | 8.75 |
| 28 | 6.75 | | | 7.10 | | 7.55 | | | 9.45 | 9.85 | 9.40 | 8.70 |
| 29 | 6.70 | | | 7.10 | | | | 8.70 | 9.45 | 9.85 | 9.40 | 8.70 |
| 30 | 6.70 | a 6.40 | | | | | | 8.70 | 9.50 | 9.85 | 9.40 | 8.70 |
| 31 | 6.70 | | a 6.20 | | | | | 8.70 | | 9.85 | 9.30 | |
| **1906–7.** | | | | | | | | | | | | |
| 1 | 8.70 | | | 7.85 | | 8.00 | | | 10.45 | | 11.17 | |
| 2 | 8.70 | | | | | | | 9.30 | 10.50 | 11.15 | 11.15 | 10.38 |
| 3 | | | | | | | | | | 11.20 | 11.15 | |
| 4 | | | | | | | | | | 11.20 | 11.13 | |
| 5 | | | | | 8.00 | | | | | 11.20 | 11.10 | |
| 6 | 8.58 | | | | | | 9.35 | | | 11.20 | | 10.30 |
| 7 | 8.56 | | 7.45 | | | | 9.35 | | | 11.20 | | 10.28 |
| 8 | 8.54 | | | | | | 9.40 | 9.92 | | 11.20 | | 10.25 |
| 9 | | | | | | | 9.40 | | 10.68 | 11.22 | | 10.23 |
| 10 | | | | 7.85 | | | 9.40 | | | 11.24 | | 10.21 |
| 11 | | 7.95 | | | | | 9.35 | | | 11.23 | 10.92 | |
| 12 | 8.40 | | | | | | | | | 11.23 | | |
| 13 | 8.40 | | | | | | | | | 11.25 | 10.90 | |
| 14 | 8.40 | | | | | | 9.45 | 10.10 | | 11.26 | 10.87 | |
| 15 | 8.40 | | 7.80 | 7.82 | | | 9.50 | 10.08 | 10.90 | 11.26 | 10.85 | |
| 16 | 8.40 | | 7.80 | | | 8.00 | | 10.08 | 10.90 | 11.25 | 10.83 | |
| 17 | 8.40 | | | | | | 9.55 | 10.10 | 10.90 | 11.26 | 10.82 | |
| 18 | 8.35 | | | | | | 9.60 | 10.14 | 10.92 | 11.26 | 10.80 | 9.90 |
| 19 | | | 7.83 | 7.80 | | 9.00 | | | 10.92 | | 10.76 | |
| 20 | | | 7.80 | | | | | 10.20 | 10.92 | | 10.75 | |
| 21 | | | 7.76 | | | | 9.60 | 10.22 | 10.93 | 11.23 | 10.74 | 9.83 |
| 22 | | | | | | | 9.63 | | | 11.22 | 10.70 | 9.80 |
| 23 | 8.12 | | 7.70 | | | | 9.63 | 10.26 | 11.00 | 11.22 | 10.66 | 9.80 |
| 24 | 8.12 | | | | | | 9.67 | 10.27 | 11.00 | 11.21 | 10.65 | |
| 25 | 8.12 | | | | | | 9.70 | 10.30 | 11.02 | 11.22 | 10.60 | |
| 26 | 8.12 | | | | | | 9.70 | | 11.03 | 11.21 | 10.60 | 9.73 |
| 27 | 8.10 | | | | | | 9.74 | | 11.05 | 11.20 | 10.58 | 9.70 |
| 28 | 8.10 | | | | | | | | | 11.20 | | |
| 29 | 8.06 | | 7.85 | | | | | 10.35 | | 11.19 | | |
| 30 | 8.00 | a 7.50 | | | | | 9.80 | 10.38 | | 11.19 | | 9.60 |
| 31 | 8.00 | | | a 8.00 | | a 9.35 | | 10.40 | | 11.19 | | |

a Estimated.

*Daily gage height, in feet, of Lake Tahoe at Tahoe, Cal., for 1900–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907-8. | | | | | | | | | | | | |
| 1 | | | 8.30 | 8.40 | | | | | | 8.10 | 7.90 | 7.33 |
| 2 | | 8.94 | 8.28 | | | | | | 7.90 | 8.10 | 7.90 | 7.30 |
| 3 | | 8.92 | 8.26 | | | | | | | 8.10 | 7.90 | 7.30 |
| 4 | | 8.90 | | | | | | | | 8.10 | 7.90 | 7.30 |
| 5 | 9.40 | 8.88 | | | | | | 7.58 | 7.90 | 8.10 | 7.88 | 7.29 |
| 6 | | 8.86 | | 8.36 | | 7.75 | | 7.58 | 7.90 | 8.10 | 7.86 | 7.28 |
| 7 | | | | | | 7.75 | 7.40 | | 7.95 | 8.10 | 7.87 | |
| 8 | | | | | | 7.75 | 7.40 | | 7.95 | 8.10 | 7.85 | |
| 9 | | | | 8.32 | | 7.70 | | 7.66 | 7.95 | 8.10 | 7.84 | 7.20 |
| 10 | 9.35 | 8.80 | | 8.32 | | 7.65 | | | 7.95 | 8.10 | 7.82 | 7.23 |
| 11 | 9.33 | 8.78 | 8.40 | 8.30 | | 7.65 | | | 7.95 | 8.10 | 7.80 | 7.20 |
| 12 | 9.32 | 8.75 | 8.40 | 8.30 | | 7.60 | 7.40 | | 7.95 | 8.10 | 7.77 | 7.20 |
| 13 | 9.30 | 8.72 | 8.40 | | | 7.60 | 7.40 | | 7.95 | 8.10 | | 7.20 |
| 14 | 9.30 | 8.70 | 8.40 | | 7.98 | 7.60 | | | 7.95 | 8.10 | | 7.20 |
| 15 | 9.28 | | | | 7.95 | 7.60 | 7.45 | 7.70 | 7.95 | 8.10 | | |
| 16 | 9.26 | | | 8.22 | | 7.60 | 7.45 | | 7.95 | 8.10 | | |
| 17 | 9.24 | | 8.38 | 8.20 | | 7.60 | 7.45 | | | 8.10 | 7.65 | 7.10 |
| 18 | 9.20 | | 8.38 | | | 7.60 | 7.50 | | | 8.08 | 7.65 | |
| 19 | 9.18 | 8.55 | | | | 7.60 | 7.50 | | 7.95 | | 7.60 | |
| 20 | 9.16 | 8.50 | 8.40 | | | 7.60 | 7.50 | | 7.95 | | 7.60 | |
| 21 | 9.14 | | | | | | 7.50 | 7.80 | | | 7.60 | 7.07 |
| 22 | | 8.47 | 8.38 | | | 7.55 | | | 8.06 | | 7.58 | 7.06 |
| 23 | | | 8.36 | 8.20 | | 7.55 | | | 8.06 | | 7.55 | |
| 24 | 9.12 | 8.40 | | | 7.75 | | | | 8.06 | | 7.53 | |
| 25 | | | | | 7.74 | | 7.50 | | 8.08 | | 7.51 | |
| 26 | | | | | 7.70 | | | | 8.08 | | 7.50 | 7.00 |
| 27 | | | | | | | | 7.85 | 8.08 | | | 6.95 |
| 28 | 9.04 | | | | | 7.40 | | | 8.08 | | | 6.96 |
| 29 | | 8.33 | 8.38 | | [a] 7.72 | | | | 8.08 | | | 6.90 |
| 30 | 9.00 | 8.30 | | | | | [a] 7.54 | | 8.08 | | | 6.90 |
| 31 | | | | [a] 8.12 | | [a] 7.40 | | [a] 7.88 | | | 7.33 | |
| 1908-9. | | | | | | | | | | | | |
| 1 | 6.89 | 6.60 | 6.40 | [a] 6.10 | | 7.90 | 7.65 | 7.80 | 8.32 | 8.92 | 8.64 | |
| 2 | | 6.60 | | | | 7.90 | 7.65 | 7.81 | 8.35 | 8.92 | 8.62 | 8.15 |
| 3 | | 6.60 | | | | 7.90 | 7.65 | 7.83 | 8.40 | 8.93 | 8.60 | 8.13 |
| 4 | 6.81 | 6.60 | | | | 7.90 | 7.65 | 7.85 | | 8.93 | | 8.12 |
| 5 | 6.80 | 6.60 | 6.40 | | 7.70 | 7.90 | 7.65 | 7.88 | 8.48 | 8.93 | | 8.10 |
| 6 | 6.78 | 6.60 | 6.40 | | | 7.90 | 7.65 | 7.90 | 8.52 | | | 8.10 |
| 7 | 6.77 | 6.60 | 6.35 | | | 7.90 | 7.65 | 7.92 | 8.55 | 8.88 | 8.57 | 8.08 |
| 8 | 6.76 | 6.56 | | | | 7.90 | 7.65 | 7.95 | 8.57 | 8.87 | 8.53 | 8.05 |
| 9 | 6.75 | 6.52 | | | | | 7.60 | 7.97 | 8.60 | 8.86 | 8.51 | 8.02 |
| 10 | 6.75 | 6.50 | | | | | | | 8.63 | 8.86 | 8.50 | |
| 11 | 6.73 | 6.50 | 6.30 | 6.45 | | | 7.60 | | 8.66 | 8.88 | 8.50 | |
| 12 | 6.70 | 6.50 | 6.30 | | 7.80 | | 7.60 | | 8.68 | 8.85 | 8.50 | |
| 13 | 6.69 | 6.50 | 6.30 | | 7.80 | | 7.60 | 8.00 | 8.70 | 8.84 | 8.45 | 7.90 |
| 14 | | 6.50 | | | | 7.80 | 7.60 | 8.02 | 8.70 | 8.84 | 8.45 | 7.88 |
| 15 | | 6.50 | | | 7.90 | 7.80 | 7.60 | | | 8.84 | 8.42 | 7.87 |
| 16 | 6.75 | 6.45 | 6.30 | 7.30 | 7.90 | 7.75 | 7.60 | | | 8.84 | 8.41 | 7.85 |
| 17 | | 6.42 | | | | 7.75 | 7.60 | | | 8.84 | 8.40 | 7.88 |
| 18 | | 6.42 | | 7.35 | | 7.75 | 7.65 | 8.09 | 8.80 | | 8.40 | |
| 19 | | 6.40 | | | 7.85 | 7.75 | 7.65 | 8.10 | 8.83 | | 8.40 | |
| 20 | | | 6.20 | | 7.85 | 7.75 | 7.65 | 8.13 | 8.82 | | | |
| 21 | | | 6.20 | | 7.85 | 7.80 | | | 8.82 | 8.80 | | |
| 22 | | | | | | 7.80 | 7.68 | | 8.83 | 8.80 | | 7.70 |
| 23 | 6.65 | | | 7.70 | | 7.80 | 7.68 | | 8.85 | 8.79 | | 7.70 |
| 24 | | 6.50 | 6.15 | | 7.90 | 7.75 | | 8.20 | 8.87 | 8.78 | 8.28 | 7.66 |
| 25 | | | 6.12 | | | 7.75 | 7.68 | 8.20 | 8.89 | | 8.25 | |
| 26 | 6.70 | | | | | 7.75 | 7.68 | 8.20 | | | 8.22 | 7.60 |
| 27 | 6.70 | | 6.12 | 7.78 | | 7.75 | 7.68 | | | | 8.20 | |
| 28 | 6.70 | 6.40 | | 7.80 | | 7.75 | 7.72 | | | 8.70 | 8.20 | |
| 29 | | 6.40 | | 7.80 | | | 7.75 | 8.25 | 8.90 | 8.69 | 8.18 | |
| 30 | 6.65 | 6.40 | | | | 7.70 | 7.78 | 8.28 | 8.90 | 8.66 | | |
| 31 | 6.62 | | [a] 6.10 | | | 7.70 | | 8.29 | | 8.66 | | |
| 1909-10. | | | | | | | | | | | | |
| 1 | 7.50 | 7.20 | | | 7.65 | 7.46 | 7.58 | | 8.46 | 8.30 | 7.87 | |
| 2 | | 7.20 | 7.50 | 7.70 | 7.63 | 7.47 | 7.58 | | 8.48 | 8.30 | 7.84 | |
| 3 | | 7.10 | 7.50 | 7.72 | 7.60 | 7.45 | 7.58 | | 8.48 | 8.26 | 7.80 | 7.10 |
| 4 | | 7.16 | 7.50 | 7.72 | 7.59 | 7.45 | 7.58 | 8.06 | 8.48 | 8.23 | 7.78 | |
| 5 | | 7.16 | 7.50 | 7.69 | 7.58 | 7.45 | 7.58 | 8.06 | 8.48 | 8.20 | 7.76 | |

[a] Estimated.

*Daily gage height, in feet, of Lake Tahoe at Tahoe, Cal., for 1900–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 6 | 7.52 | 7.14 | 7.25 | 7.65 | 7.56 | 7.42 | 7.60 | 8.06 | 8.48 | 8.20 | 7.76 | |
| 7 | 7.52 | 7.14 | | 7.68 | 7.53 | 7.41 | 7.60 | 8.10 | 8.48 | 8.20 | 7.74 | |
| 8 | 7.50 | 7.12 | | 7.67 | 7.52 | 7.41 | 7.62 | 8.10 | 8.48 | 8.18 | 7.70 | |
| 9 | 7.50 | 7.12 | 7.65 | 7.65 | 7.52 | 7.40 | 7.64 | | 8.48 | 8.16 | 7.68 | 6.96 |
| 10 | 7.45 | 7.12 | 7.68 | 7.60 | 7.51 | 7.39 | 7.65 | | 8.48 | 8.16 | 7.67 | |
| 11 | 7.45 | 7.12 | 7.70 | 7.60 | 7.50 | 7.38 | 7.65 | | 8.48 | 8.16 | 7.63 | |
| 12 | 7.45 | 7.10 | 7.72 | 7.58 | 7.50 | 7.38 | 7.67 | 8.20 | | 8.15 | 7.60 | |
| 13 | 7.41 | 7.10 | 7.74 | | | 7.38 | 7.67 | 8.17 | | | 7.60 | |
| 14 | 7.40 | 7.10 | | | | 7.42 | | | | | 7.58 | 6.85 |
| 15 | 7.40 | 7.10 | | | 7.50 | 7.40 | | | | | 7.56 | 6.85 |
| 16 | 7.38 | 7.10 | | 7.50 | 7.50 | 7.40 | 7.73 | | 8.38 | 8.09 | 7.54 | |
| 17 | 7.36 | 7.10 | | 7.50 | 7.50 | 7.40 | 7.78 | 8.25 | 8.38 | 8.06 | 7.50 | |
| 18 | 7.36 | 7.10 | | 7.50 | | 7.40 | 7.78 | 8.25 | 8.38 | 8.04 | 7.49 | |
| 19 | 7.35 | | 7.70 | 7.50 | | | 7.82 | 8.28 | 8.38 | 8.04 | 7.42 | |
| 20 | 7.34 | | | 7.48 | | | 7.88 | 8.30 | 8.38 | 8.04 | 7.40 | 6.70 |
| 21 | 7.34 | | | 7.48 | | 7.48 | 7.88 | 8.30 | 8.38 | 8.04 | 7.40 | 6.70 |
| 22 | 7.32 | | 7.50 | 7.48 | | | 7.88 | 8.30 | 8.38 | 8.04 | 7.39 | 6.70 |
| 23 | 7.32 | | 7.50 | 7.50 | | 7.56 | 7.89 | 8.30 | 8.38 | 8.02 | 7.39 | 6.65 |
| 24 | 7.30 | 7.34 | 7.49 | | 7.45 | | 7.89 | 8.30 | 8.38 | 8.00 | 7.39 | 6.63 |
| 25 | 7.30 | 7.36 | 7.49 | | 7.45 | 7.58 | | 8.33 | 8.38 | 8.00 | 7.27 | 6.60 |
| 26 | 7.30 | 7.38 | 7.48 | 7.70 | 7.45 | | | 8.35 | 8.38 | 7.96 | 7.25 | 6.60 |
| 27 | 7.28 | | 7.49 | 7.70 | 7.45 | 7.56 | | 8.36 | | 7.94 | 7.22 | 6.58 |
| 28 | 7.26 | | 7.49 | 7.70 | 7.45 | 7.58 | | 8.38 | | 7.92 | 7.20 | |
| 29 | | | 7.49 | 7.70 | | 7.56 | 8.00 | 8.40 | | 7.90 | | 6.58 |
| 30 | | | 7.48 | 7.70 | | 7.58 | | 8.40 | | 7.88 | 7.20 | 6.58 |
| 31 | 7.20 | | | 7.67 | | 7.56 | | 8.42 | | 7.88 | | |
| **1910–11.** | | | | | | | | | | | | |
| 1 | 6.58 | 6.08 | | 5.80 | | | 7.14 | 7.37 | 8.10 | | 9.06 | 8.56 |
| 2 | | 6.08 | 5.80 | 5.80 | 7.10 | | 7.16 | 7.40 | 8.12 | 9.10 | 9.06 | 8.55 |
| 3 | 6.50 | 6.08 | 5.88 | 5.80 | 7.10 | | 7.18 | | 8.14 | 9.10 | 9.06 | 8.52 |
| 4 | 6.50 | 6.06 | 5.94 | 5.79 | 7.10 | 7.00 | 7.18 | 7.48 | 8.18 | 9.10 | 8.98 | 8.50 |
| 5 | | 6.06 | 5.98 | 5.79 | 7.10 | | | | 8.22 | 9.10 | 8.98 | |
| 6 | 6.45 | 6.05 | | 5.78 | 7.10 | | 7.30 | 7.60 | 8.22 | 9.10 | 8.06 | |
| 7 | 6.45 | 6.05 | | 5.76 | 7.10 | | 7.20 | 7.60 | | | 8.95 | |
| 8 | 6.45 | 6.05 | 6.00 | 5.74 | 7.10 | 7.15 | | 7.60 | 8.32 | | 8.93 | 8.40 |
| 9 | | | 6.00 | 5.74 | 7.10 | 7.32 | | 7.60 | 8.41 | 9.15 | 8.90 | |
| 10 | | | 6.02 | 5.79 | 7.11 | 7.22 | | 7.60 | 8.45 | 9.16 | 8.90 | |
| 11 | | 6.04 | | 5.90 | 7.12 | 7.20 | | 7.65 | 8.48 | 9.16 | 8.90 | |
| 12 | 6.35 | 6.06 | | | 7.13 | | | | 8.54 | 9.18 | 8.90 | |
| 13 | | 6.04 | 5.98 | | | | | | 8.60 | 9.18 | 8.90 | |
| 14 | | 6.04 | 5.98 | | | | | | 8.66 | 9.18 | | 8.34 |
| 15 | | 6.02 | 5.98 | 6.20 | 7.14 | 7.20 | 7.22 | | 8.70 | 9.19 | | 8.22 |
| 16 | 6.20 | 6.02 | 5.98 | 6.30 | 7.15 | 7.20 | 7.22 | | 8.73 | 9.20 | 8.80 | 8.20 |
| 17 | 6.20 | 6.02 | 5.98 | 6.30 | 7.15 | 7.20 | 7.30 | | 8.79 | 9.20 | 8.80 | |
| 18 | | 6.00 | | 6.33 | 7.15 | 7.20 | | | 8.83 | 9.20 | 8.78 | |
| 19 | | 6.00 | | | | 7.20 | 7.30 | | 8.88 | 9.21 | 8.76 | |
| 20 | 6.20 | 5.90 | 5.88 | | 7.14 | 7.20 | 7.26 | 7.73 | 8.93 | 9.21 | 8.75 | 8.10 |
| 21 | 6.18 | 5.90 | 5.89 | 6.45 | 7.14 | 7.20 | 7.26 | 7.76 | | 9.21 | 8.73 | |
| 22 | 6.18 | 5.88 | 5.87 | 6.45 | 7.13 | 7.20 | 7.27 | 7.80 | 8.96 | 9.20 | 8.72 | |
| 23 | 6.15 | 5.88 | 5.86 | 6.45 | 7.12 | 7.20 | 7.28 | | | 9.18 | 8.70 | |
| 24 | 6.15 | 5.85 | 5.84 | | 7.11 | 7.20 | 7.28 | | 8.98 | 9.15 | 8.67 | |
| 25 | 6.15 | 5.86 | 5.86 | | 7.10 | 7.20 | 7.30 | | 9.00 | 9.15 | 8.65 | |
| 26 | 6.15 | 5.86 | 5.86 | 6.50 | 7.10 | 7.20 | 7.31 | | 9.00 | 9.08 | 8.65 | |
| 27 | 6.12 | 5.85 | 5.98 | 6.50 | | 7.17 | 7.31 | 7.90 | | 9.08 | 8.64 | |
| 28 | 6.12 | 5.85 | 5.85 | 6.60 | | 7.15 | 7.31 | 7.93 | 9.06 | 9.08 | 8.62 | 7.96 |
| 29 | 6.11 | 5.83 | 5.92 | 6.70 | | 7.14 | 7.33 | 7.93 | | 9.08 | 8.60 | |
| 30 | 6.10 | 5.90 | 5.91 | 6.84 | | 7.14 | 7.33 | 7.97 | 9.10 | 9.08 | 8.58 | |
| 31 | 6.08 | | 5.91 | | | 7.14 | | 8.04 | | 9.08 | 8.58 | |

*Daily gage height, in feet, of Lake Tahoe, at Tahoe, Cal., for 1900–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | | | 7.29 | | 6.90 | 6.70 | 6.65 | | 7.30 |
| 2 | | | 7.28 | 6.98 | 6.90 | | 6.65 | 6.80 | 7.31 |
| 3 | | | 7.27 | 6.98 | 6.90 | 6.09 | | 6.85 | 7.32 |
| 4 | | 7.48 | 7.26 | 6.96 | 6.84 | 6.68 | 6.62 | 6.85 | 7.38 |
| 5 | | | 7.26 | 6.96 | 6.87 | | 6.62 | 6.88 | 7.39 |
| 6 | 7.80 | | 7.26 | 6.95 | 6.88 | | 6.62 | | 7.40 |
| 7 | | 7.48 | | | 6.88 | 6.75 | | | 7.41 |
| 8 | | | | | 6.87 | 6.75 | | 6.88 | 7.47 |
| 9 | | | 7.28 | | 6.86 | | | 6.90 | 7.52 |
| 10 | | | 7.27 | | 6.85 | | | 6.92 | 7.53 |
| 11 | 7.76 | | 7.26 | 7.02 | 6.83 | | | 6.92 | 7.53 |
| 12 | | | | 7.02 | 6.83 | | 6.65 | | |
| 13 | | | 7.26 | 6.98 | | | | 6.98 | |
| 14 | | | 7.23 | 6.95 | | 6.70 | 6.65 | 6.99 | |
| 15 | | | 7.22 | 6.90 | | | 6.65 | 6.99 | |
| 16 | | | 7.21 | | 6.82 | | | 7.00 | |
| 17 | 7.70 | 7.38 | | 6.95 | | | 6.66 | 7.00 | 7.58 |
| 18 | 7.68 | 7.38 | | | 6.82 | 6.73 | 6.66 | 7.02 | 7.60 |
| 19 | 7.66 | 7.37 | 7.18 | | | 6.72 | 6.65 | 7.03 | 7.60 |
| 20 | 7.66 | 7.37 | | 6.92 | 6.82 | | | | |
| 21 | 7.64 | 7.37 | | | 6.80 | | | | |
| 22 | 7.64 | 7.37 | 7.15 | | 6.80 | 6.68 | | | |
| 23 | 7.64 | 7.37 | 7.15 | | | 6.67 | | | |
| 24 | 7.62 | 7.37 | | | | 6.66 | | 7.14 | 7.66 |
| 25 | 7.60 | 7.36 | 7.06 | | | 6.64 | | | 7.65 |
| 26 | | 7.35 | 7.00 | | 6.75 | | | | |
| 27 | | 7.34 | | 6.95 | 6.74 | 6.64 | 6.65 | 7.20 | 7.65 |
| 28 | 7.57 | 7.32 | | 6.95 | 6.73 | 6.64 | | 7.20 | 7.65 |
| 29 | 7.53 | 7.30 | 7.00 | 6.90 | 6.72 | 6.64 | | | 7.65 |
| 30 | 7.50 | 7.29 | 7.00 | 6.90 | | | | 7.30 | 7.62 |
| 31 | | | | 6.90 | | 6.65 | | 7.30 | |

## EVAPORATION AT LAKE TAHOE, CAL.

The following tables showing evaporation at Lake Tahoe have been taken from studies made by Edwin Duryea, jr.,[1] of Duryea, Haehl & Gilman, San Francisco, Cal.

The first table (Table 1, p. 79) records actual observations, estimated monthly and yearly totals, and the ratios of the evaporation in each month to the yearly total, expressed in percentage. The estimated monthly total was obtained by filling in the gaps of the record. This was done by taking into consideration the records immediately preceding and following and the climatologic conditions during the period. The estimates are believed to be conservative, in that they give a greater evaporation than actually occurred.

The second table (Table 2, p. 80) summarizes the data presented in the first and gives a maximum, minimum, and mean value for the period for each month and also percentage values for comparative purposes.

The yearly mean evaporation for the period is found to be 30.59 inches and Mr. Duryea has assumed a safe yearly evaporation of 36 inches.

A climatologic year beginning with September and ending with August has been used in the tabulation.

[1] See Eng. News, Feb. 29, 1912.

TABLE 1.—*Monthly and yearly evaporation at Lake Tahoe (elevation 6,225 feet), 1899–1906.*

[As estimated from daily observations of the United States Geological Survey and the United States Reclamation Service.]

| Month. | 1899–1900 [a] | | 1900–1901 [a] | | 1901–2 | | | | 1902–3 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Observed evaporation. | | Estimated monthly total. | | Observed evaporation. | | Estimated monthly total. | |
| | Inches. | Per cent of total for year. | Inches. | Per cent of total for year. | Days. | Inches. | Inches. | Per cent of total for year. | Days. | Inches. | Inches. | Per cent of total for year. |
| September | ........ | ...... | 3.10 | 11 | ...... | ........ | 4.12 | 16 | 24 | 2.80 | 3.40 | 10 |
| October | ........ | ...... | 2.15 | 7 | ...... | ........ | 2.65 | 10 | 0 | ........ | [b] 3.09 | 9 |
| November | ........ | ...... | 1.38 | 5 | ...... | ........ | 2.09 | 8 | 0 | ........ | [b] 2.15 | 6 |
| December | ........ | ...... | 1.33 | 5 | ...... | ........ | 1.44 | 6 | 4 | .25 | .85 | 3 |
| January | ........ | ...... | .84 | 3 | 9 | 0.35 | 1.02 | 4 | 7 | .35 | .70 | 2 |
| February | ........ | ...... | .70 | 2 | 4 | .15 | .87 | 4 | 0 | ........ | .84 | 3 |
| March | ........ | ...... | .77 | 3 | 0 | ........ | [b] 1.24 | 5 | 13 | 1.15 | 1.88 | 6 |
| April | ........ | ...... | 1.25 | 4 | 0 | ........ | [b] 1.85 | 7 | 15 | 1.50 | 2.75 | 8 |
| May | [b] [c] 2.44 | ...... | 2.42 | 9 | 5 | .30 | 1.08 | 4 | 28 | 3.05 | 3.20 | 10 |
| June | 3.80 | ...... | 3.35 | 12 | 21 | 1.90 | 2.45 | 10 | 24 | 3.40 | 3.90 | 12 |
| July | 4.00 | ...... | [b] 4.42 | 16 | 29 | 3.20 | 3.40 | 13 | 10 | 1.42 | 5.62 | 17 |
| August | 5.15 | ...... | 6.50 | 23 | 26 | 3.20 | 3.45 | 13 | 29 | 4.36 | 4.66 | 14 |
| Year | ........ | ...... | 28.21 | 100 | ...... | ........ | 25.66 | 100 | ...... | ........ | 33.04 | 100 |
| Per cent of yearly mean, 1900–1901 to 1905–6 | | | 92 | | 84 | | | | 108 | | | |

| Month. | 1903–4 | | | | 1904–5 | | | |
|---|---|---|---|---|---|---|---|---|
| | Observed evaporation. | | Estimated monthly total. | | Observed evaporation. | | Estimated monthly total. | |
| | Days. | Inches. | Inches. | Per cent of total for year. | Days. | Inches. | Inches. | Per cent of total for year. |
| September | 25 | 3.88 | 4.27 | 14 | 21 | 2.56 | 3.27 | 10 |
| October | 24 | 2.78 | 3.33 | 11 | 15 | 1.62 | 2.86 | 8 |
| November | 9 | .64 | 2.53 | 8 | 16 | 1.62 | 2.77 | 8 |
| December | 23 | 1.18 | 1.44 | 5 | 18 | 1.06 | 1.59 | 5 |
| January | 18 | .72 | 1.17 | 4 | 20 | 1.33 | 1.81 | 5 |
| February | 7 | .20 | .47 | 1 | 17 | .95 | 1.30 | 4 |
| March | 1 | .10 | .56 | 2 | 12 | .98 | 1.78 | 5 |
| April | 21 | .94 | 1.38 | 4 | 22 | 2.08 | 2.46 | 7 |
| May | 24 | 2.70 | 3.19 | 10 | 15 | 1.64 | 2.50 | 7 |
| June | 26 | 3.24 | 3.80 | 12 | 23 | 3.12 | 3.57 | 11 |
| July | 31 | 4.42 | 4.42 | 14 | 31 | 4.76 | 4.76 | 14 |
| August | 25 | 3.82 | 4.73 | 15 | 26 | 4.60 | 5.27 | 16 |
| Year | ........ | ........ | 31.29 | 100 | ........ | ........ | 33.94 | 100 |
| Per cent of yearly mean, 1900–1901 to 1905–6 | 102 | | | | 111 | | | |

[a] Values for 1899–1901 taken from Water Supply Paper 68, U. S. Geol. Survey.
[b] Filled in by using mean of all Octobers, Novembers, etc.
[c] Observed May 17–31, 14 days=1.83 inches.

TABLE 1.—*Monthly and yearly evaporation at Lake Tahoe (elevation 6,225 feet), 1899–1906*—Continued.

| Month. | 1905-6 | | | | 1906 | | | |
|---|---|---|---|---|---|---|---|---|
| | Observed evaporation. | | Estimated monthly total. | | Observed evaporation. | | Estimated monthly total. | |
| | Days. | Inches. | Inches. | Per cent of total for year. | Days. | Inches. | Inches. | Per cent of total for year. |
| September | 26 | 4.38 | 4.74 | 15 | 25 | 3.22 | 3.34 | ------ |
| October | 29 | 3.36 | 3.52 | 12 | 29 | 3.44 | 3.73 | ------ |
| November | 17 | 1.75 | 2.78 | [illegible] | [illegible] | .42 | [illegible] | ------ |
| December | 22 | 1.58 | 1.55 | 6 | [illegible] | ------ | .42 | ------ |
| January | 10 | .40 | 1.12 | 4 | ------ | ------ | ------ | ------ |
| February | 3 | .18 | .88 | 3 | ------ | ------ | ------ | ------ |
| March | 11 | .64 | 1.20 | 4 | ------ | ------ | ------ | ------ |
| April | 14 | .83 | 1.42 | 4 | ------ | ------ | ------ | ------ |
| May | 17 | 1.64 | 2.28 | 7 | ------ | ------ | ------ | ------ |
| June | 13 | 1.49 | 2.39 | 8 | ------ | ------ | ------ | ------ |
| July | 31 | 4.30 | 4.30 | 14 | ------ | ------ | ------ | ------ |
| August | 25 | 3.80 | 4.36 | 14 | ------ | ------ | ------ | ------ |
| Year | | | 31.41 | 100 | | | | 100 |
| Per cent of yearly mean, 1900-1901 to 1905-6 | | | 103 | | | | | |

TABLE 2.—*Maximum, minimum, and mean evaporation at Lake Tahoe in each month from September, 1900, to August, 1906.*

| Month. | Maximum value for period. | | | Minimum value for period. | | | Mean value for period. | | Mean of all per cents 1900-1901 to 1905-6. |
|---|---|---|---|---|---|---|---|---|---|
| | Inches. | Per cent of year. | Per cent of mean value for period. | Inches. | Per cent of year. | Per cent of mean value for period. | Inches. | Per cent of year. | |
| September | 4.74 | 12 | 124 | 3.10 | 15 | 81 | 3.83 | 13 | 13 |
| October | 3.52 | 9 | 124 | 2.15 | 10 | 70 | 3.09 | 10 | [illegible] |
| November | 2.73 | 7 | 129 | 1.35 | 7 | 63 | 2.15 | 7 | 7 |
| December | 1.85 | 5 | 142 | .62 | 3 | 48 | 1.30 | 4 | [illegible] |
| January | 1.81 | 4 | 163 | .70 | 4 | 63 | 1.11 | 4 | 4 |
| February | 1.50 | 3 | 151 | .47 | 2 | 55 | .96 | 3 | 3 |
| March | 1.88 | 5 | 152 | .76 | 3 | 45 | 1.24 | 4 | 4 |
| April | 2.75 | 7 | 149 | 1.25 | 6 | 68 | 1.85 | 6 | [illegible] |
| May | 3.20 | 8 | 131 | 1.08 | 5 | 44 | 2.44 | 8 | [illegible] |
| June | 3.90 | 10 | 117 | 2.59 | 11 | 72 | 3.32 | 11 | [illegible] |
| July | 5.62 | 14 | 127 | 3.40 | 17 | 77 | 4.42 | 14 | [illegible] |
| August | 6.50 | 16 | 133 | 3.45 | 17 | 70 | 4.90 | 16 | [illegible] |
| Year | 40.15 | 100 | 132 | 20.52 | 100 | 67 | 30.51 | 100 | 100 |

Yearly mean for period, 30.59 inches.

## TRUCKEE RIVER AT TAHOE, CAL.

This station, which is located at Tahoe, Cal., about one-fourth mile below the outlet of Lake Tahoe, in the NW. ¼ sec. 7, T. 15 N., R. 17 E., was established July 3, 1895, discontinued February 29, 1896, and reestablished June 17, 1900, to obtain information needed by the United States Reclamation Service in connection with the Truckee-Carson project.

A timber dam across the river about 500 feet from the lake completely regulates the flow of the river, sometimes causing sudden fluctuations and often cutting down the outflow to 15 or 20 second-feet, or the amount of leakage through the dam.

The station is equipped with a vertical staff gage and a cable and car, from which discharge measurements are made.

The channel is liable to shift only in a slight degree and records are reliable. The datum of the gage has not been changed. The flow is practically unaffected by ice.

The 1910 discharge measurements made by the Stone & Webster Engineering Corporation have been furnished to the United States Geological Survey for publication. This station has been maintained in cooperation with the United States Reclamation Service.

*Discharge measurements of Truckee River at Tahoe, Cal., in 1900–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1900. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| June 18 | L. H. Taylor | 0.75 | 92 | July 26 | W. A. Wolf | 1.80 | 226 |
| 30 | do | 1.45 | 240 | | | | |
| July 12 | do | 1.60 | 277 | 1906. | | | |
| Sept. 7 | do | 1.40 | 225 | July 2 | M. B. Kennedy | 2.90 | 765 |
| Oct. 23 | do | .40 | 52 | Aug. 4 | do | 2.50 | 682 |
| 23 | do | .95 | 130 | | | | |
| 23 | do | 1.15 | 158 | 1907. | | | |
| | | | | May 22 | Nicholas and Porter | 3.50 | 870 |
| 1901. | | | | June 27 | E. A. Porter | 4.10 | 1,280 |
| Sept. 5 | C. V. Taylor | 1.94 | 386 | | | | |
| 12 | do | 1.86 | 356 | 1908. | | | |
| Nov. 11 | do | 1.57 | 296 | June 17 | E. A. Porter | .60 | 19 |
| 11 | do | 1.28 | 187 | July 8 | M. B. Kennedy | 1.60 | 226 |
| 11 | do | 1.00 | 141 | | | | |
| | | | | 1909. | | | |
| 1902. | | | | May 18 | L. J. Towne | 1.40 | 134 |
| Oct. 22 | E. C. Murphy | 1.67 | 320 | 1910. | | | |
| | | | | Feb. 3 | Stone & Webster Eng. Corp | .78 | 80 |
| 1903. | | | | 4 | do | 2.77 | 657 |
| June 20 | G. B. Lorenz | .10 | 13 | 4 | do | 3.06 | 758 |
| 26 | do | .79 | 116 | 4 | do | 2.92 | 725 |
| July 20 | do | 1.50 | 235 | 5 | do | 3.16 | 815 |
| 30 | do | 1.90 | 412 | Mar. 13 | Williamson and Bumstedt | 1.10 | 102 |
| 1904. | | | | 17 | Stone & Webster Eng. Corp | 1.10 | 110 |
| June 28 | W. A. Wolf | 3.50 | 899 | 17 | do | 1.55 | 226 |
| July 2 | do | 3.35 | 875 | 18 | do | 1.99 | 380 |
| 14 | do | 3.35 | 879 | 18 | do | 2.28 | 420 |
| 22 | do | 3.35 | 856 | 18 | do | 2.43 | 468 |
| Aug. 14 | do | 3.20 | 818 | 19 | do | 2.56 | 555 |
| 30 | do | 2.85 | 674 | 19 | do | 2.67 | 588 |
| Nov. 15 | do | 2.90 | 711 | Sept. 19 | T. W. Norcross | 2.23 | 409 |
| 1905. | | | | 1911. | | | |
| Apr. 14 | W. A. Wolf | .30 | 15.4 | June 6 | J. E. Stewart | 1.32 | 186 |
| May 24 | do | 1.27 | 203 | Sept. 27 | F. C. Ebert | 2.04 | 347 |
| June 13 | do | 1.30 | 211 | | | | |
| 19 | do | 1.30 | 205 | | | | |

[illegible] RT III

[illegible]

[illegible]

[illegible]

*Daily gage height, in feet, of* [illegible]

| Day. | Oct. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1901–2.** | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | [illegible] |
| 7 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | | |
| 8 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 9 | 1.7 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | | | [illegible] | | |
| 10 | 1.7 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | | | |
| 12 | ------ | [illegible] | [illegible] | [illegible] | ---- | [illegible] | [illegible] | [illegible] | | [illegible] | | |
| 13 | 1.65 | [illegible] | [illegible] | [illegible] | --- | [illegible] | [illegible] | | | [illegible] | | |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | |
| 15 | 1.65 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | |
| 18 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | |
| 19 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | |
| 20 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | |
| 23 | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | [illegible] | |
| 24 | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | [illegible] | |
| 25 | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 26 | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | [illegible] | [illegible] | |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | | | | [illegible] | [illegible] |
| 30 | 1.65 | [illegible] | [illegible] | [illegible] | ----- | [illegible] | [illegible] | | | | [illegible] | [illegible] |
| 31 | 1.65 | ------ | [illegible] | [illegible] | ------ | [illegible] | ------ | | [illegible] | [illegible] | [illegible] | |
| **1902–3.** | | | | | | | | | | | | |
| 1 | 1.75 | 1.8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] |
| 2 | 1.75 | 1.8 | [illegible] | [illegible] | [illegible] | [illegible] | | | | [illegible] | [illegible] | |
| 3 | 1.75 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] |
| 4 | 1.75 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] |
| 5 | 1.75 | [illegible] | 1.9 | [illegible] | [illegible] | [illegible] | [illegible] | | | | [illegible] | [illegible] |
| 6 | 1.7 | [illegible] | 1.9 | [illegible] | [illegible] | [illegible] | | | | [illegible] | [illegible] | [illegible] |
| 7 | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | [illegible] | [illegible] | [illegible] |
| 8 | 1.75 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | [illegible] | [illegible] |
| 9 | 1.8 | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | | | | | [illegible] | [illegible] |
| 10 | 1.8 | 1.7 | 1.75 | [illegible] | [illegible] | [illegible] | --- | [illegible] | | [illegible] | [illegible] | [illegible] |
| 11 | 1.8 | 1.7 | 1.75 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] |
| 12 | 1.8 | 1.7 | 1.75 | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] |
| 13 | 1.8 | 1.7 | 1.75 | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] |
| 14 | 1.8 | 1.7 | 1.75 | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | | [illegible] |
| 15 | 1.75 | 1.7 | 1.75 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] |
| 16 | 1.75 | 1.7 | 1.75 | [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] |
| 17 | 1.75 | 1.7 | 1.7 | [illegible] | [illegible] | [illegible] | | | | [illegible] | | [illegible] |
| 18 | 1.75 | 1.7 | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | | [illegible] |
| 19 | 1.75 | [illegible] | 1.7 | [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] | | [illegible] |
| 20 | 1.75 | [illegible] | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | |
| 21 | 1.7 | [illegible] | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 22 | 1.7 | [illegible] | 1.7 | ------ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 23 | 1.7 | [illegible] | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 24 | 1.7 | [illegible] | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 1.7 | [illegible] | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 26 | 1.7 | [illegible] | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | 1.7 | [illegible] | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 1.8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 1.8 | [illegible] | 1.65 | [illegible] | ------ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 1.8 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | 1.8 | ------ | [illegible] | [illegible] | ------ | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| **1903–4.** | | | | | | | | | | | | |
| 1 | 1.85 | 1.9 | 1.2 | 1.9 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 1.85 | 2.1 | 1.2 | 1.9 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 1.8 | 2.1 | 1.2 | 1.9 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 1.8 | 2.1 | 1.2 | 1.9 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 1.8 | 1.9 | 1.2 | 1.9 | 1.4 | .1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Truckee River at Tahoe, Cal., for 1895, and 1900–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | | |
| 6 | 1.8 | 1.9 | 1.6 | 1.9 | 1.4 | 1.3 | 2.5 | 3.1 | 3.4 | 3.4 | 3.25 | 3.0 |
| 7 | 1.8 | 1.9 | 1.6 | 1.9 | .4 | 1.3 | 2.5 | 3.1 | 3.4 | 3.4 | 3.25 | 3.0 |
| 8 | 1.8 | 1.9 | 1.6 | 1.9 | .4 | 1.3 | 2.5 | 3.1 | 3.4 | 3.4 | 3.25 | 3.15 |
| 9 | 1.8 | 1.9 | 1.6 | 1.9 | .4 | 1.3 | 2.5 | 3.1 | 3.4 | 3.4 | 3.25 | 3.15 |
| 10 | 1.8 | 1.9 | 1.6 | 1.4 | .4 | 1.9 | 2.5 | 3.1 | 3.4 | 3.3 | 3.25 | 3.15 |
| 11 | 1.8 | 1.9 | 1.6 | 1.4 | .4 | 1.9 | 2.5 | 3.1 | 3.4 | 3.3 | 3.25 | 3.15 |
| 12 | 1.8 | ...... | 1.6 | 1.7 | .9 | 1.9 | 2.5 | 3.1 | 3.4 | 3.3 | 3.25 | 3.15 |
| 13 | 2.0 | ...... | 1.6 | 1.6 | 1.5 | 1.9 | 2.5 | 3.1 | 3.4 | 3.3 | 3.25 | 3.15 |
| 14 | 2.0 | ...... | 1.6 | 1.6 | .6 | 1.9 | 2.5 | 3.1 | 3.4 | 3.4 | 3.2 | 3.15 |
| 15 | 2.0 | ...... | 1.6 | 1.6 | .6 | 2.5 | 2.5 | 3.1 | 3.5 | 3.4 | 3.3 | 3.1 |
| 16 | 2.0 | ...... | 1.6 | 1.6 | 1.01 | 2.5 | 2.5 | 3.1 | 3.5 | 3.4 | 3.3 | 3.1 |
| 17 | 2.0 | ...... | 1.6 | 1.6 | 1.01 | 2.5 | 2.6 | 3.15 | 3.5 | 3.5 | 3.3 | 3.1 |
| 18 | 1.95 | .95 | 1.6 | 1.6 | 1.01 | 2.5 | 2.6 | 3.15 | 3.5 | 3.5 | 3.3 | 3.0 |
| 19 | 1.95 | .95 | 1.6 | 1.4 | .9 | 2.5 | 2.6 | 3.15 | 3.55 | 3.45 | 3.2 | 3.1 |
| 20 | 1.95 | ...... | 1.5 | 1.4 | .9 | 2.5 | 2.6 | 3.15 | 3.55 | 3.45 | 3.2 | 3.1 |
| 21 | 1.95 | ...... | 1.5 | 1.4 | .1 | 2.5 | 2.6 | 3.15 | 3.55 | 3.4 | 3.2 | 3.1 |
| 22 | 1.95 | ...... | 1.5 | 1.4 | .1 | 2.5 | 2.6 | 3.15 | 3.55 | 3.4 | 2.9 | 3.1 |
| 23 | 1.95 | .9 | 1.5 | 1.4 | .1 | 2.5 | 2.6 | 3.15 | 3.55 | 3.4 | 2.9 | 3.1 |
| 24 | 1.95 | .9 | 1.5 | 1.4 | .1 | 2.5 | 2.7 | 3.3 | 3.5 | 3.4 | 2.9 | 3.1 |
| 25 | 1.95 | .9 | 1.5 | 1.4 | .1 | 2.5 | 2.8 | 3.3 | 3.5 | 3.4 | 2.9 | 3.0 |
| 26 | 1.95 | .9 | 1.5 | 1.4 | .1 | 2.5 | 2.8 | 3.3 | 3.4 | 3.35 | 2.9 | 3.0 |
| 27 | 1.95 | .9 | 1.5 | 1.4 | .1 | 2.3 | 2.8 | 3.25 | 3.5 | 3.35 | 2.9 | 3.0 |
| 28 | 1.95 | 1.2 | 1.5 | 1.4 | .1 | 2.3 | 2.8 | 3.25 | 3.5 | 3.35 | 2.9 | 3.0 |
| 29 | 1.95 | 1.2 | 1.5 | 1.4 | .1 | 2.3 | 3.1 | 3.25 | 3.5 | 3.35 | 2.85 | 3.0 |
| 30 | 1.95 | 1.2 | 1.9 | 1.4 | ...... | 2.4 | 3.1 | 3.55 | 3.5 | 3.35 | 2.85 | 3.0 |
| 31 | 1.95 | ...... | 1.9 | 1.4 | ...... | 2.4 | ...... | 3.55 | ...... | 3.35 | 2.85 | ...... |
| 1904–5. | | | | | | | | | | | | |
| 1 | 3.0 | 3.0 | 2.8 | 2.7 | 1.6 | 2.55 | 0.4 | 0.3 | 1.3 | 1.45 | 1.9 | 2.0 |
| 2 | 3.1 | 3.0 | 2.75 | 2.7 | 1.6 | 2.55 | .4 | .3 | 1.3 | 1.45 | 2.0 | 2.0 |
| 3 | 3.1 | 3.0 | 2.75 | 2.7 | 1.65 | 2.55 | .4 | .3 | 1.3 | 1.45 | 2.0 | 2.0 |
| 4 | 3.1 | 3.0 | 2.75 | 2.7 | 1.65 | 2.5 | .4 | .7 | 1.3 | 1.5 | 2.0 | 2.0 |
| 5 | 3.1 | 3.0 | 2.7 | 2.7 | 1.65 | 2.5 | .4 | 1.0 | 1.3 | 1.5 | 2.0 | 2.0 |
| 6 | 2.2 | 3.0 | 2.7 | 2.6 | 1.65 | 2.5 | .4 | 1.0 | 1.3 | 1.5 | 2.0 | 2.0 |
| 7 | 2.2 | 3.0 | 2.65 | 2.6 | 2.0 | 2.5 | .4 | 1.25 | 1.3 | 1.5 | 2.0 | 2.0 |
| 8 | 2.2 | 3.0 | 2.65 | 2.6 | 2.0 | 2.5 | .4 | 1.25 | 1.3 | 1.5 | 2.0 | 2.0 |
| 9 | 2.2 | 3.0 | 2.65 | 2.6 | 2.0 | 2.5 | .4 | 1.25 | 1.3 | 1.5 | 1.95 | 2.0 |
| 10 | 2.2 | 3.0 | 2.6 | 2.6 | 2.0 | 2.5 | .4 | 1.25 | 1.3 | 1.5 | 2.0 | 2.0 |
| 11 | 2.2 | 3.0 | 2.6 | 1.6 | 2.0 | 2.5 | .4 | 1.25 | 1.3 | 1.5 | 2.0 | 1.9 |
| 12 | 2.5 | 3.0 | 2.6 | 1.6 | 2.0 | 2.5 | .3 | 1.25 | 1.3 | 1.5 | 2.0 | 1.9 |
| 13 | 2.5 | 3.0 | 2.6 | 1.6 | 2.0 | 2.5 | .3 | 1.25 | 1.3 | 1.6 | 2.0 | 1.9 |
| 14 | 3.1 | 3.0 | 2.6 | 1.6 | 2.0 | 2.5 | .3 | 1.25 | 1.3 | 1.6 | 2.0 | 1.9 |
| 15 | 3.1 | 3.0 | 2.6 | 1.6 | 2.0 | 1.6 | .3 | 1.25 | 1.3 | 1.6 | 2.0 | 1.9 |
| 16 | 3.1 | 2.9 | 2.6 | 1.6 | 2.0 | 1.6 | .3 | 1.25 | 1.3 | 1.6 | 2.0 | 1.9 |
| 17 | 3.1 | 2.9 | 2.55 | 1.6 | 2.0 | 1.6 | .3 | 1.25 | 1.3 | 1.6 | 2.0 | 1.9 |
| 18 | 3.0 | 2.85 | 2.55 | 1.6 | 2.0 | 1.6 | .3 | 1.25 | 1.3 | 1.6 | 2.0 | 2.0 |
| 19 | 3.0 | 2.85 | 2.55 | 2.5 | 2.55 | 1.6 | .3 | 1.25 | 1.3 | 1.9 | 2.0 | 2.0 |
| 20 | 3.15 | 2.85 | 2.55 | 2.5 | 2.55 | 1.15 | .3 | 1.25 | 1.3 | 1.9 | 2.0 | 2.0 |
| 21 | 3.15 | 2.85 | 2.55 | 2.5 | 2.55 | 1.15 | .3 | 1.25 | 1.3 | 1.9 | 2.0 | 2.0 |
| 22 | 2.4 | 2.85 | 2.56 | 1.6 | 2.55 | 1.15 | .3 | 1.25 | 1.3 | 1.9 | 2.0 | 2.0 |
| 23 | 2.4 | 2.85 | 2.55 | 1.6 | 2.55 | .4 | .3 | 1.3 | 1.3 | 1.9 | 2.0 | 2.0 |
| 24 | 2.4 | 2.8 | 2.55 | 1.6 | 2.55 | .4 | .3 | 1.3 | 1.35 | 1.9 | 2.0 | 2.0 |
| 25 | 2.8 | 2.8 | 2.6 | 1.6 | 2.55 | .4 | .3 | 1.3 | 1.35 | 1.9 | 2.0 | 2.0 |
| 26 | 2.8 | 2.8 | 2.6 | 1.6 | 2.55 | .4 | .3 | 1.3 | 1.45 | 1.9 | 2.0 | 2.0 |
| 27 | 3.1 | 2.8 | 2.6 | 1.6 | 2.55 | .4 | .3 | 1.3 | 1.45 | 1.9 | 2.0 | 2.0 |
| 28 | 3.1 | 2.8 | 2.6 | 1.6 | 2.55 | .4 | .3 | 1.3 | 1.45 | 1.9 | 2.0 | 2.0 |
| 29 | 3.1 | 2.8 | 2.6 | 1.6 | ...... | .4 | .3 | 1.3 | 1.45 | 1.9 | 2.0 | 2.0 |
| 30 | 3.1 | 2.8 | 2.65 | 1.6 | ...... | .4 | .3 | 1.3 | 1.45 | 1.9 | 2.0 | 2.0 |
| 31 | 3.1 | ...... | 2.7 | 1.6 | ...... | .4 | ...... | 1.3 | ...... | 1.9 | 2.0 | ...... |
| 1905–6. | | | | | | | | | | | | |
| 1 | 2.0 | 1.8 | 1.7 | 1.4 | 2.0 | 2.1 | 2.25 | 2.4 | 2.45 | 2.9 | 3.0 | 3.2 |
| 2 | 2.0 | 1.8 | 1.7 | 1.4 | 2.0 | 2.1 | 2.25 | 2.4 | 2.45 | 2.9 | 3.0 | 3.2 |
| 3 | 2.0 | 1.8 | 1.7 | 1.4 | 2.0 | 2.1 | 2.25 | 2.4 | 2.45 | 2.9 | 3.0 | 3.2 |
| 4 | 2.1 | 1.8 | 1.7 | 1.4 | 2.0 | 2.1 | 2.25 | 2.4 | 2.45 | 2.9 | ...... | 3.2 |
| 5 | 2.1 | 1.7 | 1.7 | 1.4 | 2.0 | 2.1 | 2.3 | 2.4 | 2.45 | 2.9 | 2.55 | 3.2 |
| 6 | 2.1 | 1.7 | 1.7 | 1.4 | 2.0 | 2.1 | 2.3 | 2.4 | 2.45 | 2.9 | 2.55 | 3.2 |
| 7 | 2.1 | 1.7 | 1.7 | 1.4 | 2.0 | 2.1 | 2.3 | 2.5 | 2.45 | 2.9 | 2.55 | 3.2 |
| 8 | 2.1 | 1.7 | 1.7 | 1.4 | 2.0 | 2.1 | 2.3 | 2.28 | 2.45 | 2.9 | 2.55 | 3.2 |
| 9 | 2.1 | 1.7 | 1.6 | 1.4 | 1.95 | 2.1 | 2.3 | 2.28 | 2.85 | 2.9 | 2.55 | 3.2 |
| 10 | 2.1 | 1.7 | 1.6 | 1.4 | 1.95 | 2.1 | 2.3 | 2.6 | 2.85 | 3.0 | 3.1 | 3.2 |

*Daily gage height, in feet, of Truckee River at Tahoe, Cal., for 19[illegible], and 19[illegible]—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1905–6.** | | | | | | | | | | | | |
| 11 | 2.1 | 1.7 | 1.6 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | 2.1 | 1.7 | 1.6 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 2.0 | 1.7 | 1.6 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 2.0 | 1.7 | 1.6 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 2.0 | 1.7 | 1.6 | 1.6 | 2.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 2.0 | 1.7 | 1.6 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | 2.0 | 1.7 | 1.5 | 1.7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | 2.0 | 1.7 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | 2.0 | 1.7 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | 2.0 | 1.7 | 1.5 | 1.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 2.0 | 1.7 | 1.5 | 1.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | 1.9 | 1.7 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | 1.9 | 1.7 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | 1.9 | 1.7 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 1.9 | 1.7 | 1.5 | 2.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | 1.9 | 1.6 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | 1.9 | 1.6 | 1.5 | 2.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 1.9 | 1.6 | 1.5 | 2.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 1.9 | 1.6 | 1.4 | 2.0 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 1.9 | 1.6 | 1.4 | 2.0 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | 1.8 | ...... | 1.4 | 2.0 | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... |
| **1906–7.** | | | | | | | | | | | | |
| 1 | 2.0 | 2.95 | 2.7 | 2.9 | 2.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 2.8 | 2.95 | 2.7 | 2.9 | 2.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 2.7 | 2.95 | 2.7 | 2.9 | 2.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 2.7 | 2.95 | 2.7 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 2.7 | 2.95 | 2.7 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.1 |
| 6 | 2.7 | 2.95 | 2.7 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | 2.8 | 2.95 | 2.6 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | 2.8 | 2.95 | 2.6 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 2.8 | 2.95 | 2.6 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | 3.2 | 2.95 | 2.7 | 2.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | 3.2 | 2.95 | 2.7 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.1 |
| 12 | 3.2 | 2.95 | 2.7 | 2.9 | 3.0 | [illegible] | [illegible] | 3.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 3.2 | 2.95 | 2.7 | 2.9 | 3.0 | [illegible] | [illegible] | 3.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 3.2 | 2.95 | 2.7 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 3.2 | 2.95 | 2.9 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 3.2 | 2.95 | 2.9 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | 3.2 | 2.9 | 2.9 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | 3.2 | 2.9 | 2.9 | 2.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | 3.2 | 2.9 | 2.9 | 2.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | 3.1 | 2.9 | 2.8 | 2.9 | 3.0 | [illegible] | [illegible] | [illegible] | 4.0 | [illegible] | [illegible] | [illegible] |
| 21 | 3.1 | 2.85 | 2.8 | 2.9 | 3.0 | [illegible] | [illegible] | 3.5 | 4.0 | [illegible] | [illegible] | [illegible] |
| 22 | 3.1 | 2.85 | 2.8 | 2.9 | [illegible] | [illegible] | [illegible] | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | 3.1 | 2.85 | 2.8 | 2.9 | 3.0 | [illegible] | [illegible] | 3.6 | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | 2.95 | 2.85 | 2.8 | 2.9 | 3.0 | [illegible] | [illegible] | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 2.95 | 2.85 | 2.8 | 2.9 | 3.0 | 3.2 | 3.2 | 3.5 | 4.0 | [illegible] | 4.05 | 4.1 |
| 26 | 2.95 | 2.85 | 2.8 | 2.9 | 3.0 | 3.2 | [illegible] | 3.6 | 4.0 | [illegible] | [illegible] | 4.1 |
| 27 | 2.95 | 2.75 | 2.8 | 2.9 | 3.0 | 3.2 | [illegible] | 3.6 | 4.1 | [illegible] | [illegible] | 4.1 |
| 28 | 2.95 | 2.75 | 2.8 | 2.9 | 3.0 | 3.2 | [illegible] | 3.6 | 4.1 | [illegible] | 4.1 | [illegible] |
| 29 | 2.95 | 2.75 | 2.85 | 2.9 | ...... | 3.2 | [illegible] | 3.6 | [illegible] | [illegible] | [illegible] | 4.05 |
| 30 | 2.95 | 2.7 | 2.85 | 2.9 | ...... | 3.2 | [illegible] | 3.6 | [illegible] | [illegible] | [illegible] | 4.05 |
| 31 | 2.95 | ...... | 2.9 | 2.9 | ...... | 3.2 | ...... | 3.6 | ...... | [illegible] | 4.1 | ...... |
| **1907–8.** | | | | | | | | | | | | |
| 1 | 4.05 | 3.7 | 3.2 | 3.1 | 3.0 | 2.75 | [illegible] | 1.0 | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 4.0 | 3.7 | 3.2 | 3.1 | 3.0 | [illegible] | [illegible] | 1.0 | 1.0 | [illegible] | [illegible] | [illegible] |
| 3 | 2.2 | 3.7 | 3.2 | 3.1 | 3.0 | 2.75 | [illegible] | 1.0 | 1.0 | [illegible] | 2.1 | [illegible] |
| 4 | 3.75 | 3.65 | 3.2 | 3.1 | [illegible] | 2.75 | [illegible] | 1.0 | 1.0 | [illegible] | 2.1 | 2.0 |
| 5 | 4.0 | 3.65 | 3.2 | 3.1 | [illegible] | 2.75 | [illegible] | 1.0 | 1.0 | [illegible] | 2.1 | 2.0 |
| 6 | 4.0 | 3.6 | 3.2 | 3.1 | 2.95 | 2.75 | [illegible] | 1.0 | 1.0 | [illegible] | 2.35 | [illegible] |
| 7 | 4.0 | ...... | 3.2 | 3.1 | 2.95 | 2.75 | [illegible] | 1.0 | 1.0 | [illegible] | 2.35 | [illegible] |
| 8 | 4.0 | 3.5 | 3.2 | 3.1 | 2.9 | 2.75 | 1.7 | 1.0 | 1.0 | [illegible] | 2.35 | 2.25 |
| 9 | 4.0 | 3.5 | 3.3 | 3.1 | 2.9 | 2.75 | 1.7 | 1.1 | 1.0 | 1.2 | 2.35 | 2.1 |
| 10 | 4.0 | 3.5 | 3.3 | 3.1 | 2.85 | 2.7 | 1.7 | 1.1 | .6 | 1.7 | 2.35 | 2.1 |
| 11 | 3.65 | 3.5 | 3.3 | 3.1 | 2.85 | 2.7 | 1.7 | 1.1 | .6 | 1.7 | 2.35 | 2.1 |
| 12 | 4.0 | 3.5 | 3.3 | 3.1 | 2.85 | 2.7 | 1.7 | .65 | .6 | 1.7 | 2.35 | 2.1 |
| 13 | 4.0 | 3.5 | 3.3 | 3.05 | 2.85 | 2.7 | 1.3 | .65 | .6 | 1.7 | 2.35 | 2.1 |
| 14 | 3.95 | 3.5 | 3.3 | 3.05 | 2.85 | 2.7 | 1.3 | .65 | .6 | 1.7 | 2.35 | 2.1 |
| 15 | 3.95 | 3.5 | 3.3 | 3.05 | 2.8 | 2.7 | 1.3 | .7 | .6 | 1.7 | 2.35 | 2.1 |

*Daily gage height*, [illegible]

| Day. | [illegible] |
|---|---|
| **1907-8.** | |
| 16 | |
| 17 | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | |
| 23 | |
| 24 | |
| 25 | |
| 26 | |
| 27 | |
| 28 | |
| 29 | |
| 30 | |
| 31 | |
| **1908-9.** | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| [illegible] | |

*Rating tables for Truckee River at Tahoe, Cal*—Continued.

**January 1, [illegible], to December 31, [illegible].**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.30 | 15 | 1.40 | 229 | 2.50 | 552 | [illegible] | [illegible] |
| 0.40 | 31 | 1.50 | 253 | 2.60 | [illegible] | [illegible] | [illegible] |
| 0.50 | 47 | 1.60 | 279 | 2.70 | 622 | [illegible] | [illegible] |
| 0.60 | 64 | 1.70 | 306 | 2.80 | 659 | [illegible] | [illegible] |
| 0.70 | 82 | 1.80 | 334 | 2.90 | 697 | 4.00 | [illegible] |
| 0.80 | 100 | 1.90 | 363 | 3.00 | 736 | [illegible] | [illegible] |
| 0.90 | 119 | 2.00 | 392 | 3.10 | 776 | [illegible] | [illegible] |
| 1.00 | 139 | 2.10 | 422 | 3.20 | 817 | [illegible] | [illegible] |
| 1.10 | 160 | 2.20 | 453 | 3.30 | 859 | | |
| 1.20 | 182 | 2.30 | 485 | 3.40 | 902 | | |
| 1.30 | 205 | 2.40 | 518 | 3.50 | 946 | | |

NOTE.—Applicable only to open channel. Based on 12 discharge measurements made during [illegible] to 1907, and is fairly well defined.

**January 1 to December 31, [illegible].**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.30 | 0 | 1.10 | 110 | 1.90 | [illegible] | [illegible] | [illegible] |
| 0.40 | 3 | 1.20 | 133 | 2.00 | [illegible] | [illegible] | [illegible] |
| 0.50 | 9 | 1.30 | 157 | 2.10 | [illegible] | [illegible] | [illegible] |
| 0.60 | 19 | 1.40 | 182 | 2.20 | [illegible] | [illegible] | [illegible] |
| 0.70 | 33 | 1.50 | 209 | 2.30 | 462 | [illegible] | [illegible] |
| 0.80 | 49 | 1.60 | 237 | 2.40 | [illegible] | [illegible] | [illegible] |
| 0.90 | 67 | 1.70 | [illegible] | 2.50 | [illegible] | [illegible] | [illegible] |
| 1.00 | 88 | 1.80 | 296 | 2.60 | [illegible] | | |

NOTE.—Applicable only to open channel. Based on 2 discharge measurements made during [illegible] and earlier measurements at high stages, and is not well defined.

*Daily discharge, in second-feet, of Truckee River at Tahoe, Cal., for [illegible].*

| Day. | Jan. | Feb. | Mar. | Apr. | May | June. | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 258 | 417 | 438 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 258 | 417 | 438 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 258 | 386 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 258 | 386 | 429 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 5 | 204 | 386 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | 204 | [illegible] | 438 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | 217 | 417 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | 230 | 429 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 244 | 429 | 438 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | 244 | 429 | [illegible] | [illegible] | 711 | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | 350 | 429 | 711 | [illegible] | 711 | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | 244 | 450 | 711 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 192 | 450 | 711 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 15 | 450 | 711 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 15 | 429 | 711 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 15 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | 15 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | 15 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | 15 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | 15 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 15 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | 96 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | 96 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | 96 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | 96 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | 514 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | 514 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | 534 | 429 | [illegible] | [illegible] | [illegible] | [illegible] | | | |
| [illegible] | 534 | ........ | [illegible] | [illegible] | [illegible] | [illegible] | | | |
| [illegible] | 534 | ........ | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | 534 | ........ | [illegible] | | [illegible] | | | | |

*Daily gage height, in feet, of Truckee River at Tahoe, Cal., for 1895, and 1900–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 16 | 3.95 | 3.45 | 3.3 | 3.05 | 2.8 | 2.7 | 1.3 | 0.7 | 0.6 | 1.7 | 2.35 | 2.1 |
| 17 | 3.9 | 3.45 | 3.2 | 3.0 | 2.8 | 2.7 | 1.3 | .7 | .6 | 1.9 | 2.3 | 2.1 |
| 18 | 3.95 | 3.45 | 3.2 | 3.0 | 2.8 | 2.7 | 1.0 | .7 | .6 | 1.9 | 2.3 | 2.1 |
| 19 | 3.85 | 3.4 | 3.2 | 3.0 | 2.8 | 2.7 | 1.0 | .7 | .6 | 1.9 | 2.3 | 2.1 |
| 20 | 3.85 | 3.4 | 3.2 | 3.0 | 2.8 | 2.7 | 1.0 | .7 | .6 | 1.9 | 2.25 | 2.1 |
| 21 | 3.8 | 3.35 | 3.2 | 3.0 | 2.75 | 2.7 | 1.0 | .75 | .6 | 2.35 | 2.25 | 2.1 |
| 22 | 3.8 | 3.35 | 3.2 | 3.0 | 2.75 | 2.65 | 1.0 | .75 | .6 | 2.35 | 2.25 | 2.1 |
| 23 | 3.8 | 3.3 | 3.2 | 3.0 | 2.75 | 2.65 | 1.0 | .75 | .95 | 2.35 | 2.25 | 2.05 |
| 24 | 3.8 | 3.3 | 3.2 | 3.0 | 2.75 | 2.65 | 1.0 | .75 | .95 | 2.35 | 2.25 | 2.05 |
| 25 | 3.75 | 3.3 | 3.2 | 3.0 | 2.7 | 2.65 | 1.0 | .75 | .95 | 2.35 | 2.25 | 2.05 |
| [illegible] | 3.73 | 3.3 | 3.2 | 3.0 | 2.7 | 2.65 | 1.0 | .75 | .95 | 2.35 | 2.25 | 2.05 |
| [illegible] | 3.73 | 3.25 | 3.2 | 3.0 | 2.7 | 2.6 | 1.0 | .75 | .95 | 2.35 | 2.2 | 2.05 |
| [illegible] | 3.73 | 3.25 | 3.1 | 3.0 | 2.7 | 2.6 | 1.0 | .75 | .95 | 2.35 | 2.2 | 2.05 |
| [illegible] | 3.73 | 3.2 | 3.1 | 3.0 | 2.7 | 2.25 | 1.0 | .75 | .95 | 2.35 | 2.2 | 2.05 |
| [illegible] | [illegible] | 3.2 | 3.1 | 3.0 | ...... | 2.25 | 1.0 | .75 | .95 | 2.35 | 2.2 | 2.05 |
| [illegible] | [illegible] | ...... | 3.1 | 3.0 | ...... | 2.25 | ...... | .75 | ...... | 2.35 | 2.15 | ...... |
| [illegible] | | | | | | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.7 | 2.75 | 2.75 | 1.78 | 1.43 | 3.3 | 2.6 | 2.56 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.7 | 2.75 | 2.75 | 1.55 | 1.45 | 3.3 | 2.6 | 2.56 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.65 | 2.75 | 2.75 | 2.8 | 1.47 | 3.3 | 2.6 | 2.56 |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | 2.65 | 2.75 | 2.75 | 1.9 | 1.47 | 1.9 | 2.6 | 2.56 |
| 5 | [illegible] | [illegible] | [illegible] | 1.5 | 2.65 | 2.75 | 2.75 | 2.85 | 1.47 | 3.3 | 2.55 | 2.28 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 2.75 | 2.85 | 1.47 | 3.3 | 2.55 | 2.28 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 2.75 | 2.85 | 1.48 | 3.3 | 2.55 | 2.27 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 2.75 | 1.75 | 1.5 | 3.3 | 2.55 | 2.26 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 2.75 | 1.75 | 1.5 | 2.6 | 2.55 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.7 | 2.9 | 2.05 | 2.6 | 2.58 | 2.25 |
| [illegible] | [illegible] | [illegible] | 1.75 | 2.0 | [illegible] | [illegible] | 2.7 | 2.9 | 2.45 | 2.2 | 2.25 | 2.24 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.7 | 2.3 | 2.45 | 2.2 | 2.2 | 2.23 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.7 | 2.3 | 2.8 | 2.2 | 2.2 | 2.22 |
| [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 2.7 | 2.5 | 2.8 | 1.85 | 2.33 | 2.21 |
| [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 2.7 | 1.4 | 2.8 | 1.85 | 2.33 | 2.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 2.7 | 1.4 | 2.8 | 1.85 | 2.33 | 2.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | ...... | 2.75 | [illegible] | [illegible] | 1.4 | 2.8 | 2.05 | .9 | 2.19 |
| [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | 1.4 | [illegible] | 1.5 | 2.38 | 2.17 |
| [illegible] | [illegible] | [illegible] | [illegible] | ...... | 2.75 | [illegible] | 2.75 | 1.4 | 2.65 | 2.05 | 2.38 | 2.16 |
| [illegible] | [illegible] | [illegible] | [illegible] | ...... | 2.75 | [illegible] | .6 | 1.4 | 3.3 | 2.05 | 2.38 | 2.16 |
| [illegible] | [illegible] | [illegible] | [illegible] | ...... | 2.75 | [illegible] | [illegible] | 1.4 | 3.3 | 2.05 | 2.67 | 2.15 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | [illegible] | [illegible] | 1.4 | 3.3 | 2.05 | 2.67 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | [illegible] | [illegible] | 1.4 | 3.3 | 2.7 | 2.65 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | [illegible] | [illegible] | 1.4 | 2.6 | 2.7 | 2.65 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 2.8 | [illegible] | 1.4 | 3.3 | 2.7 | 2.63 | 2.3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | [illegible] | [illegible] | 1.4 | 3.3 | 2.7 | 2.61 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | [illegible] | 2.29 | 1.4 | 3.3 | 2.7 | 2.6 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | [illegible] | [illegible] | 1.4 | 3.3 | 2.65 | 2.59 | 2.35 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | 3.3 | 2.65 | 2.58 | 2.35 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | 1.62 | 1.45 | 3.3 | 2.65 | 2.58 | 2.35 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | 2.8 | ...... | 1.45 | ...... | 2.6 | 2.58 | ...... |
| [illegible] | | | | | | | | | | | | |
| [illegible] | [illegible] | [illegible] | 1.70 | [illegible] | [illegible] | [illegible] | 1.10 | 1.90 | 1.20 | 2.80 | 2.90 | 2.50 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.4 | [illegible] | 1.10 | 1.90 | 1.20 | 2.20 | 2.90 | 2.50 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.74 | 1.20 | 3.10 | 2.85 | 2.50 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.10 | 1.30 | 1.20 | 2.95 | 2.65 | 2.40 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.20 | [illegible] | [illegible] | 1.30 | [illegible] | 2.95 | 2.65 | 2.40 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.20 | [illegible] | 1.10 | 1.30 | 1.20 | 2.95 | 2.85 | 2.40 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.53 | 2.95 | 2.85 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.65 | 2.95 | 2.85 | 2.37 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.04 | 2.95 | 2.80 | 2.35 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.14 | [illegible] | 1.30 | 1.89 | 2.76 | 2.78 | 2.35 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.30 | 1.89 | 2.76 | 2.80 | 2.35 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.50 | 2.76 | 2.78 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.90 | 2.76 | 2.78 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.78 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.44 | 2.76 | 2.78 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.92 | 3.00 | 2.76 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.00 | 2.74 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.00 | 2.72 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.00 | 2.70 | 2.25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.15 | 2.70 | 2.00 |
| [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.30 | 2.70 | 2.04 |
| [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.30 | 2.66 | 2.02 |
| [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.66 | 1.96 |
| [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.16 | 2.90 | 2.66 | 1.96 |
| [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.16 | 2.90 | 2.66 | 2.15 |

*Daily gage height, in feet, of Truckee River at [illegible]*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | 2.10 | | [illegible] | [illegible] | | [illegible] | | [illegible] | | [illegible] | [illegible] | |
| 1910-11. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | | [illegible] | [illegible] | | [illegible] | | [illegible] | | [illegible] | [illegible] | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 2.03 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | 2.02 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | 2.00 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | 2.00 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 2.00 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | 2.07 | 2.00 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | 2.07 | 2.00 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 2.07 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 2.07 | 1.99 | 2.70 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 2.07 | 1.99 | 2.70 | [illegible] | ...... | [illegible] | .62 | .43 | .47 |
| 31 | 2.07 | ........ | 2.70 | [illegible] | | [illegible] | ...... | .43 | .... |

NOTE.—Gage heights are affected by the raising and lowering of the gates at the regulating dam.

*Rating tables for Truckee River at Tahoe, Cal.*

**June 17 to December 31, 1900.**

| Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.30 | 45 | 1.10 | 155 |
| 0.40 | 52 | 1.20 | 177 |
| 0.50 | 61 | 1.30 | 200 |
| 0.60 | 72 | 1.40 | 224 |
| 0.70 | 85 | 1.50 | 248 |
| 0.80 | 99 | 1.60 | 272 |
| 0.90 | 116 | 1.70 | 297 |
| 1.00 | 135 | | |

**January 1, 1901, to December 31, 1902.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| −0.20 | 15 | 0.50 | 61 | 1.20 | 178 | 1.90 | 372 |
| −0.10 | 20 | 0.60 | 72 | 1.30 | 201 | 2.00 | 407 |
| 0.00 | 25 | 0.70 | 85 | 1.40 | 225 | 2.10 | 445 |
| 0.10 | 30 | 0.80 | 100 | 1.50 | 251 | 2.20 | 486 |
| 0.20 | 36 | 0.90 | 117 | 1.60 | 279 | 2.30 | 531 |
| 0.30 | 43 | 1.00 | 136 | 1.70 | 308 | 2.40 | 580 |
| 0.40 | 51 | 1.10 | 156 | 1.80 | 339 | | |

**January 1 to December 31, 1903.**

| Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.10 | 13 | 0.70 | 93 |
| 0.20 | 25 | 0.80 | 109 |
| 0.30 | 38 | 0.90 | 125 |
| 0.40 | 51 | 1.00 | 142 |
| 0.50 | 64 | 1.10 | 160 |
| 0.60 | 78 | 1.20 | 179 |

NOTE.—Above a gage height of 1.20 feet this table is the same as the 1901-2 table.

**January 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.10 | 13 | 1.10 | 181 | 2.10 | 450 | 3.10 | 773 |
| 0.20 | 24 | 1.20 | 204 | 2.20 | 480 | 3.20 | 807 |
| 0.30 | 37 | 1.30 | 228 | 2.30 | 510 | 3.30 | 841 |
| 0.40 | 51 | 1.40 | 253 | 2.40 | 542 | 3.40 | 877 |
| 0.50 | 66 | 1.50 | 279 | 2.50 | 574 | 3.50 | 913 |
| 0.60 | 82 | 1.60 | 305 | 2.60 | 606 | 3.60 | 949 |
| 0.70 | 100 | 1.70 | 333 | 2.70 | 638 | 3.70 | 985 |
| 0.80 | 119 | 1.80 | 361 | 2.80 | 671 | 3.80 | 1,021 |
| 0.90 | 139 | 1.90 | 390 | 2.90 | 705 | 3.90 | 1,057 |
| 1.00 | 159 | 2.00 | 420 | 3.00 | 739 | | |

NOTE.—Table is applicable only to open channel. It is based upon 12 discharge measurements made during 1902 to 1904, inclusive. It is well defined between gage heights 0.10 foot and 3.50 feet.

[illegible]

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |

NOTE.—[illegible] 1907, [illegible]

[illegible]

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | | | | | |
| [illegible] | | [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | | | | | |

NOTE.—[illegible] earlier [illegible]

*Daily discharge,* [illegible]

| Day | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | | | | | | [illegible] |
| 29 | [illegible] | | [illegible] | | | | | | [illegible] |
| 30 | [illegible] | | [illegible] | | | | | | [illegible] |
| 31 | [illegible] | | [illegible] | | | | | | |

*Daily discharge in second-feet of Truckee River at Tahoe, Cal., for 1909–1912*—Contd.

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10 | | | | | | | | | | | | |
| 1 | 458 | 438 | 258 | [illegible] | 247 | 819 | 114 | [illegible] | 124 | [illegible] | [illegible] | [illegible] |
| 2 | 456 | [illegible] | 247 | [illegible] | [illegible] | [illegible] | 114 | [illegible] | 124 | [illegible] | [illegible] | [illegible] |
| 3 | 449 | 419 | 250 | [illegible] | [illegible] | [illegible] | 114 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 449 | 367 | 250 | [illegible] | 827 | 819 | 114 | [illegible] | 124 | 722 | [illegible] | [illegible] |
| 5 | 449 | 367 | 250 | 808 | 827 | [illegible] | 114 | [illegible] | 124 | 722 | [illegible] | [illegible] |
| 6 | 449 | 367 | 367 | 808 | 827 | 819 | 114 | 158 | 124 | 722 | [illegible] | [illegible] |
| 7 | 445 | 367 | 367 | [illegible] | 827 | [illegible] | 114 | [illegible] | 132 | 722 | [illegible] | [illegible] |
| 8 | 438 | 367 | 426 | [illegible] | 827 | [illegible] | 114 | [illegible] | 244 | 722 | [illegible] | [illegible] |
| 9 | 419 | 367 | 404 | [illegible] | 827 | [illegible] | 114 | [illegible] | [illegible] | 722 | [illegible] | [illegible] |
| 10 | 412 | 367 | 404 | 808 | 827 | 802 | 114 | 158 | 315 | 642 | [illegible] | [illegible] |
| 11 | 412 | 367 | 404 | 808 | 827 | 798 | 114 | [illegible] | 325 | 642 | [illegible] | [illegible] |
| 12 | [illegible] | 367 | 404 | 808 | 827 | 743 | 114 | [illegible] | [illegible] | 642 | [illegible] | [illegible] |
| 13 | 412 | 367 | 322 | 790 | 827 | [illegible] | 114 | 124 | [illegible] | 642 | [illegible] | [illegible] |
| 14 | 419 | 367 | 254 | 790 | 827 | 114 | 114 | 114 | [illegible] | 642 | [illegible] | [illegible] |
| 15 | 419 | 367 | [illegible] | 790 | 827 | 114 | 114 | 114 | 310 | 642 | [illegible] | [illegible] |
| 16 | 419 | 367 | [illegible] | [illegible] | 827 | 114 | 114 | 114 | 324 | 743 | [illegible] | [illegible] |
| 17 | 419 | 364 | [illegible] | [illegible] | 827 | 247 | 114 | 114 | [illegible] | 743 | [illegible] | [illegible] |
| 18 | 416 | 364 | [illegible] | 777 | 827 | 426 | 114 | 114 | 344 | 743 | [illegible] | [illegible] |
| 19 | 258 | 364 | [illegible] | 777 | 827 | 114 | 114 | 114 | 344 | 743 | [illegible] | [illegible] |
| 20 | 258 | 367 | [illegible] | 773 | 823 | 114 | 114 | 114 | 344 | [illegible] | [illegible] | [illegible] |
| 21 | 412 | 367 | [illegible] | [illegible] | 819 | 114 | 114 | 114 | 344 | 456 | [illegible] | [illegible] |
| 22 | 408 | 367 | [illegible] | [illegible] | 819 | 114 | 114 | 124 | 344 | [illegible] | [illegible] | [illegible] |
| 23 | 405 | 367 | [illegible] | [illegible] | 819 | 114 | 114 | 124 | 430 | [illegible] | [illegible] | [illegible] |
| 24 | 402 | 367 | [illegible] | [illegible] | 819 | 114 | 114 | 124 | 405 | 701 | [illegible] | [illegible] |
| 25 | 394 | 367 | [illegible] | [illegible] | 819 | 114 | 114 | 124 | 405 | 701 | [illegible] | [illegible] |
| 26 | 388 | 367 | [illegible] | [illegible] | 819 | 114 | 209 | 124 | 743 | 701 | [illegible] | [illegible] |
| 27 | 384 | 367 | [illegible] | [illegible] | 814 | 114 | 494 | 124 | [illegible] | 701 | [illegible] | [illegible] |
| 28 | 419 | 367 | [illegible] | [illegible] | 819 | 114 | 494 | 124 | 438 | 701 | [illegible] | [illegible] |
| 29 | 449 | 367 | [illegible] | [illegible] | ...... | 114 | 209 | 124 | 381 | 701 | [illegible] | [illegible] |
| 30 | 475 | 367 | [illegible] | [illegible] | ...... | 114 | 318 | 134 | 381 | 701 | [illegible] | [illegible] |
| 31 | 384 | ...... | 890 | [illegible] | ...... | 114 | ...... | 124 | ...... | 701 | [illegible] | ...... |
| 1910-11 | | | | | | | | | | | | |
| 1 | 377 | 281 | 302 | 241 | 267 | 676 | 651 | 145 | 158 | 848 | 350 | [illegible] |
| 2 | 377 | 281 | 302 | 236 | 267 | 659 | 655 | 145 | 158 | 848 | 304 | [illegible] |
| 3 | 374 | 281 | 302 | 258 | 270 | 651 | 659 | 145 | 158 | 848 | 367 | [illegible] |
| 4 | 374 | 281 | 267 | 261 | 204 | 638 | 650 | 149 | 158 | 848 | 367 | [illegible] |
| 5 | 374 | 281 | 258 | 258 | 494 | 634 | 659 | 149 | 158 | 848 | 367 | [illegible] |
| 6 | 370 | 278 | 278 | 267 | 494 | 630 | 701 | 149 | 158 | 848 | 367 | [illegible] |
| 7 | 367 | 278 | 281 | 156 | 494 | 638 | 705 | 152 | 158 | 848 | 367 | [illegible] |
| 8 | 364 | 281 | 281 | 158 | 659 | 688 | 705 | 152 | 158 | 848 | 367 | [illegible] |
| 9 | 357 | 281 | 281 | 230 | 659 | 709 | 705 | 152 | 158 | 848 | 367 | [illegible] |
| 10 | 350 | 281 | 287 | 287 | 659 | 709 | 705 | 152 | 161 | 848 | 367 | 377 |
| 11 | 350 | 281 | 287 | 287 | 659 | 709 | 705 | 152 | 161 | 848 | 367 | [illegible] |
| 12 | 350 | 281 | 287 | 311 | 663 | 705 | 705 | 152 | 165 | 848 | 402 | [illegible] |
| 13 | 350 | 275 | 287 | 335 | 663 | 705 | 709 | 152 | 170 | 852 | 402 | [illegible] |
| 14 | 344 | 275 | 258 | 360 | 663 | 701 | 709 | 152 | 172 | 852 | 402 | [illegible] |
| 15 | 344 | 275 | 255 | 384 | 663 | 676 | 709 | 154 | 172 | 859 | 391 | [illegible] |
| 16 | 344 | 275 | 255 | 384 | 667 | 676 | 709 | 154 | 255 | 859 | 384 | [illegible] |
| 17 | 340 | 275 | 255 | 384 | 667 | 672 | 705 | 154 | 475 | 859 | 384 | [illegible] |
| 18 | 340 | 272 | 255 | 388 | 667 | 672 | 705 | 154 | 634 | 859 | 438 | [illegible] |
| 19 | 334 | 272 | 236 | 388 | 667 | 672 | 642 | 154 | 735 | 859 | 464 | [illegible] |
| 20 | 328 | 258 | 236 | 391 | 676 | 672 | 583 | 154 | 743 | 861 | 475 | [illegible] |
| 21 | 318 | 258 | 236 | 402 | 676 | 672 | 583 | 154 | 743 | 861 | 475 | [illegible] |
| 22 | 318 | 258 | 236 | 402 | 676 | 672 | 583 | 156 | 743 | 861 | 475 | [illegible] |
| 23 | 318 | 302 | 233 | 402 | 676 | 672 | 583 | 156 | 835 | 861 | 467 | [illegible] |
| 24 | 312 | 302 | 230 | 402 | 676 | 672 | 583 | 156 | 835 | 856 | 464 | [illegible] |
| 25 | 312 | 302 | 230 | 293 | 676 | 672 | 583 | 156 | 785 | 856 | 464 | [illegible] |
| 26 | 312 | 302 | 230 | 293 | 676 | 672 | 583 | 156 | 819 | 456 | 456 | [illegible] |
| 27 | 312 | 302 | 225 | 293 | 676 | 659 | 145 | 156 | 848 | 456 | 456 | [illegible] |
| 28 | 312 | 302 | 275 | 290 | 676 | 655 | 145 | 156 | 848 | 456 | 456 | [illegible] |
| 29 | 306 | 290 | 272 | 258 | ...... | 651 | 145 | 156 | 848 | 402 | 456 | [illegible] |
| 30 | 299 | 281 | 267 | 258 | ...... | 651 | 145 | 158 | 848 | 402 | 449 | [illegible] |
| 31 | 287 | ...... | 252 | 258 | ...... | 651 | ...... | 158 | ...... | 402 | 449 | ...... |

*Daily discharge, in second-feet, of Truckee River at Tahoe, Cal., for 1911-12—Contd.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| **1911-12.** | | | | | | | | | |
| 1 | 350 | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 350 | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 344 | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 344 | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 344 | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | 344 | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | 344 | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | 344 | 374 | 344 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 344 | 374 | 344 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | 334 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 360 | [illegible] | 334 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | 350 | 353 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | 350 | 353 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 350 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | 374 | 350 | [illegible] | [illegible] | 244 | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | 374 | 350 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 374 | 350 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 374 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 374 | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | 374 | ...... | [illegible] | [illegible] | ...... | [illegible] | ...... | [illegible] | ...... |

NOTE.—Daily discharge determined from a well-defined rating curve. [illegible] Jan. 1-14, [illegible], estimated.

*Monthly discharge of Truckee River at Tahoe, Cal., for 1895-96 and 1900-1912.*

[Drainage area, 519 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1895.** | | | | | | | |
| July | 1,155 | 442 | 914 | [illegible] | [illegible] | [illegible] | |
| August | 441 | 393 | 425 | [illegible] | .94 | [illegible] | |
| September | 392 | 357 | 374 | .72 | [illegible] | 22,244 | |
| **1895-96.** | | | | | | | |
| October | 496 | 344 | 415 | .80 | .92 | 25,538 | |
| November | 471 | [illegible] | 437 | .84 | .94 | [illegible] | |
| December | 253 | 246 | 250 | .48 | .56 | [illegible] | |
| January | 293 | 244 | 262 | .50 | .58 | 16,102 | |
| February | 292 | [illegible] | 290 | .56 | .60 | [illegible] | |
| **1900.** | | | | | | | |
| March | | | 0 | 0 | 0 | 0 | |
| April | | | 0 | 0 | 0 | 0 | |
| May | | | 0 | 0 | 0 | 0 | |
| June | 236 | 0 | 52 | .10 | .11 | 3,106 | |
| July | 260 | 0 | 214 | .41 | .47 | 13,131 | |
| August | 260 | 211 | 232 | .45 | .53 | 14,261 | |
| September | 224 | 177 | 196 | .38 | .43 | 11,667 | |

*Monthly discharge of Truckee River at Tahoe, Cal., for 1895–96 and 1900–1912*—Contd.

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Per square mile. | Run-off. Depth in inches on drainage area. | Total in acre-feet. | Accuracy. |
|---|---|---|---|---|---|---|---|
| **1900–1901.** | | | | | | | |
| October | 177 | 155 | 159 | 0.31 | 0.36 | 9,781 | |
| November | 200 | 0 | 126 | .26 | .29 | 8,047 | |
| December | 99 | 0 | 81 | .16 | .18 | 4,981 | |
| January | 117 | 85 | 102 | .196 | .23 | 6,262 | |
| February | 117 | 30 | 81 | .156 | .16 | 4,502 | |
| March | 30 | 30 | 30 | .058 | .07 | 1,845 | |
| April | 30 | 9 | 9 | .018 | .02 | 565 | |
| May | 0 | 0 | 0 | .000 | .00 | 0 | |
| June | 178 | 0 | 30 | .058 | .06 | 1,765 | |
| July | 293 | 156 | 225 | .433 | .50 | 13,809 | |
| August | 555 | 293 | 419 | .803 | .93 | 25,760 | |
| September | 390 | 117 | 326 | .628 | .70 | 19,395 | |
| The year | 555 | 0 | 133 | .256 | 3.50 | 96,700 | |
| **1901–2.** | | | | | | | |
| October | 308 | 251 | 282 | .542 | .62 | 17,308 | |
| November | 293 | 189 | 247 | .475 | .53 | 14,678 | |
| December | 189 | 100 | 111 | .214 | .25 | 6,841 | |
| January | 146 | 100 | 125 | .24 | .28 | 7,686 | |
| February | 126 | 25 | 73 | .14 | .15 | 4,054 | |
| March | 100 | 43 | 52 | .10 | .12 | 3,197 | |
| April | 51 | 47 | 48 | .10 | .11 | 2,856 | |
| May | 117 | 47 | 97 | .19 | .22 | 5,964 | |
| June | 100 | 40 | 95 | .18 | .20 | 5,653 | |
| July | 372 | 100 | 204 | .39 | .45 | 12,543 | |
| August | 445 | 372 | 406 | .78 | .90 | 24,964 | |
| September | 407 | 324 | 350 | .67 | .75 | 20,826 | |
| The year | 445 | 25 | 174 | .335 | 4.58 | 127,000 | |
| **1902–3.** | | | | | | | |
| October | 339 | 308 | 324 | .62 | .71 | 19,922 | |
| November | 407 | 308 | 346 | .67 | .75 | 20,588 | |
| December | 407 | 293 | 326 | .63 | .73 | 20,045 | |
| January | 293 | 44 | 266 | .51 | .59 | 16,356 | |
| February | 213 | 51 | 103 | .20 | .21 | 5,720 | |
| March | 225 | 13 | 190 | .37 | .43 | 11,683 | |
| April | 13 | 13 | 13 | .03 | .03 | 774 | |
| May | 13 | 13 | 13 | .03 | .03 | 799 | |
| June | 93 | 13 | 38 | .07 | .08 | 2,261 | |
| July | 308 | 93 | 205 | .39 | .45 | 12,605 | |
| August | 389 | 308 | 344 | .66 | .76 | 21,152 | |
| September | 426 | 355 | 398 | .77 | .86 | 23,683 | |
| The year | 426 | 13 | 214 | .412 | 5.63 | 156,000 | |
| **1903–4.** | | | | | | | |
| October | 407 | 339 | 374 | .72 | .83 | 22,996 | |
| November | 445 | 125 | 255 | .49 | .55 | 15,174 | |
| December | 372 | 179 | 260 | .50 | .58 | 15,987 | |
| January | 390 | 253 | 305 | .588 | .68 | 18,750 | |
| February | 253 | 13 | 111 | .214 | .23 | 6,385 | |
| March | 574 | 13 | 401 | .773 | .89 | 24,660 | |
| April | 773 | 574 | 610 | 1.18 | 1.32 | 36,300 | |
| May | 931 | 773 | 799 | 1.54 | 1.78 | 49,130 | |
| June | 931 | 841 | 899 | 1.73 | 1.93 | 53,490 | |
| July | 913 | 841 | 873 | 1.68 | 1.94 | 53,680 | |
| August | 841 | 688 | 787 | 1.52 | 1.75 | 48,390 | |
| September | 895 | 688 | 761 | 1.47 | 1.64 | 45,280 | |
| The year | 931 | 13 | 536 | 1.03 | 14.12 | 390,000 | |
| **1904–5.** | | | | | | | |
| October | 790 | 480 | 672 | 1.29 | 1.49 | 41,320 | |
| November | 739 | 671 | 711 | 1.37 | 1.53 | 42,310 | |
| December | 671 | 590 | 614 | 1.18 | 1.36 | 37,750 | |
| January | 622 | 279 | 410 | .790 | .91 | 25,210 | |
| February | 569 | 279 | 433 | .834 | .87 | 24,050 | |
| March | 569 | 31 | 321 | .618 | .71 | 19,740 | |
| April | 31 | 15 | 20.9 | .040 | .04 | 1,244 | |
| May | 205 | 15 | 173 | .333 | .38 | 10,640 | |
| June | 241 | 205 | 212 | .408 | .46 | 12,620 | |
| July | 363 | 241 | 303 | .584 | .67 | 18,630 | |
| August | 392 | 363 | 391 | .753 | .87 | 24,040 | |
| September | 392 | 363 | 385 | .742 | .83 | 22,910 | |
| The year | 790 | 15 | 387 | .745 | 10.12 | 280,000 | |

*Monthly discharge of Truckee River at Tahoe, Cal., for 1895–96, and 1900–1912—Contd.*

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1905–6.** | | | | | | | |
| October | 422 | 334 | 390 | 0.751 | 0.87 | 23,980 | |
| November | 334 | 279 | 305 | .588 | .66 | 18,150 | |
| December | 306 | 229 | 271 | .522 | .60 | 16,660 | |
| January | 392 | 229 | 304 | .586 | .68 | 18,700 | |
| February | 422 | 378 | 396 | .763 | .79 | 22,000 | |
| March | 469 | 422 | 443 | .854 | .98 | 27,200 | |
| April | 502 | 469 | 488 | .940 | 1.05 | 29,000 | |
| May | 640 | 392 | 543 | 1.05 | 1.21 | 33,400 | |
| June | 697 | 535 | 594 | 1.14 | 1.27 | 35,300 | |
| July | 736 | 697 | 725 | 1.40 | 1.61 | 44,600 | |
| August | 838 | 552 | 753 | 1.45 | 1.67 | 46,300 | |
| September | 817 | 697 | 759 | 1.46 | 1.63 | 45,200 | |
| The year | 838 | 229 | 498 | .960 | 13.02 | 360,000 | |
| **1906–7.** | | | | | | | |
| October | 817 | 392 | 726 | 1.40 | 1.61 | 44,600 | |
| November | 716 | 622 | 695 | 1.34 | 1.50 | 41,400 | |
| December | 697 | 586 | 647 | 1.25 | 1.44 | 39,800 | |
| January | 697 | 697 | 697 | 1.34 | 1.54 | 42,900 | B. |
| February | 736 | 697 | 732 | 1.41 | 1.47 | 40,700 | B. |
| March | 817 | 736 | 765 | 1.47 | 1.70 | 47,000 | A. |
| April | 859 | 604 | 806 | 1.55 | 1.73 | 48,000 | A. |
| May | 991 | 859 | 919 | 1.77 | 2.04 | 56,500 | A. |
| June | 1,230 | 991 | 1,130 | 2.18 | 2.43 | 67,200 | A. |
| July | 1,340 | 1,230 | 1,300 | 2.50 | 2.88 | 79,900 | A. |
| August | 1,320 | 1,180 | 1,250 | 2.41 | 2.78 | 76,900 | A. |
| September | 1,230 | 1,130 | 1,210 | 2.33 | 2.60 | 72,000 | A. |
| The year | 1,340 | 392 | 906 | 1.74 | 23.72 | 657,000 | |
| **1907–8.** | | | | | | | |
| October | 1,210 | 453 | 1,100 | 2.14 | 2.47 | 67,600 | A. |
| November | 1,040 | 817 | 925 | 1.78 | 1.99 | 55,000 | A. |
| December | 859 | 776 | 823 | 1.59 | 1.83 | 50,600 | B. |
| January | 775 | 733 | 752 | 1.45 | 1.67 | 46,200 | B. |
| February | 733 | 612 | 666 | 1.28 | 1.38 | 38,300 | B. |
| March | 632 | 444 | 596 | 1.15 | 1.33 | 36,600 | A. |
| April | 444 | 88 | 212 | .408 | .46 | 12,600 | A. |
| May | 110 | 26 | 56.8 | .109 | .13 | 3,490 | A. |
| June | 88 | 19 | 53.9 | .104 | .12 | 3,210 | A. |
| July | 480 | 78 | 311 | .599 | .69 | 19,100 | A. |
| August | 480 | 393 | 453 | .873 | 1.01 | 27,900 | A. |
| September | 410 | 360 | 390 | .751 | .84 | 23,200 | A. |
| The year | 1,210 | 19 | 528 | 1.02 | 13.92 | 384,000 | |
| **1908–9.** | | | | | | | |
| October | 393 | 312 | 354 | .682 | .79 | 21,800 | A. |
| November | 312 | 296 | 300 | .578 | .64 | 17,900 | A. |
| December | 312 | 252 | 278 | .536 | .62 | 17,100 | B. |
| January | 534 | ........ | 220 | .424 | .49 | 13,500 | B. |
| February | 659 | 575 | 630 | 1.21 | 1.26 | 35,000 | A. |
| March | 701 | 575 | 660 | 1.27 | 1.46 | 40,600 | A. |
| April | 659 | 35 | 584 | 1.13 | 1.26 | 34,800 | A. |
| May | 680 | 179 | 321 | .618 | .71 | 19,700 | A. |
| June | 869 | 186 | 569 | 1.10 | 1.23 | 33,900 | A. |
| July | 869 | 204 | 555 | 1.07 | 1.23 | 34,100 | A. |
| August | 604 | 77 | 525 | 1.01 | 1.16 | 32,300 | A. |
| September | 559 | 402 | 452 | .871 | .97 | 26,900 | A. |
| The year | 869 | 36 | 454 | .875 | 11.82 | 328,000 | |
| **1909–10.** | | | | | | | |
| October | 475 | 258 | 413 | .796 | .92 | 25,400 | A. |
| November | 456 | 364 | 374 | .721 | .80 | 22,300 | A. |
| December | 890 | 258 | 559 | 1.08 | 1.24 | 34,400 | A. |
| January | 898 | 861 | 883 | 1.70 | 1.96 | 54,300 | B. |
| February | 827 | 247 | 791 | 1.52 | 1.58 | 43,900 | B. |
| March | 819 | 108 | 982 | .767 | .88 | 24,500 | A. |
| April | 494 | 114 | 315 | .293 | .33 | 9,040 | A. |
| May | 318 | 114 | 148 | .285 | .33 | 9,100 | A. |
| June | 743 | 134 | 332 | .640 | .71 | 19,800 | A. |
| July | 785 | 381 | 656 | 1.26 | 1.45 | 40,300 | A. |
| August | 701 | 419 | 628 | 1.21 | 1.40 | 38,600 | A. |
| September | 534 | 337 | 436 | .840 | .94 | 25,900 | A. |
| The year | 898 | 108 | 481 | .926 | 12.54 | 348,000 | |

*Monthly discharge of Truckee River at Tahoe, Cal., for 1895–96 and 1900–1912*—Contd.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1910–11.** | | | | | | | |
| October | 377 | 287 | 339 | 0.653 | 0.75 | 20,800 | A. |
| November | 302 | 258 | 281 | .542 | .60 | 16,700 | A. |
| December | 302 | 225 | 262 | .505 | .58 | 16,100 | B. |
| January | 402 | 156 | 307 | .592 | .68 | 18,900 | A. |
| February | 676 | 204 | 590 | 1.14 | 1.19 | 32,800 | A. |
| March | 709 | 630 | 671 | 1.29 | 1.49 | 41,300 | A. |
| April | 709 | 145 | 592 | 1.14 | 1.27 | 35,200 | A. |
| May | 158 | 145 | 153 | .295 | .34 | 9,410 | B. |
| June | 848 | 158 | 447 | .861 | .96 | 26,600 | A. |
| July | 861 | 402 | 771 | 1.49 | 1.72 | 47,400 | A. |
| August | 475 | 204 | 409 | .788 | .91 | 25,100 | A. |
| September | 449 | 350 | 377 | .726 | .81 | 22,400 | A. |
| The year | 861 | 145 | 433 | .835 | 11.30 | 313,000 | |
| **1911–12.** | | | | | | | |
| October | 374 | 344 | 359 | .692 | .80 | 22,100 | A. |
| November | 374 | 347 | 365 | .703 | .78 | 21,700 | A. |
| December | 617 | 312 | 400 | .771 | .89 | 24,600 | A. |
| January | 617 | 258 | 422 | .813 | .94 | 25,900 | A. |
| February | 287 | 179 | 261 | .503 | .54 | 15,000 | A. |
| March | 258 | 124 | 229 | .441 | .51 | 14,100 | A. |
| April | 134 | 35 | 67.0 | .129 | .14 | 3,990 | B. |
| May | 45 | 18 | 23.5 | .045 | .05 | 1,440 | C. |
| June | 26 | 19 | 22.1 | .043 | .05 | 1,320 | C. |
| The period | | | | | | 130,000 | |

NOTE.—Values for winter periods may be somewhat in error on account of ice.

*Monthly discharge of Truckee River at Boca, Cal., for 1890.*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). |
|---|---|---|---|---|---|
| March | 637 | 39,200 | August | 736 | 45,300 |
| April | 2,751 | 164,000 | September | 513 | 30,500 |
| May | 5,275 | 325,000 | October | 555 | 34,100 |
| June | 4,291 | 255,000 | | | |
| July | 1,870 | 115,000 | The period | | 1,010,000 |

## TRUCKEE RIVER NEAR NEVADA-CALIFORNIA STATE LINE.

This station, which is located at Calvada, 1 mile upstream from the California State line, 17 miles west of Reno, Nev., was established September 7, 1899, at Farad, 2½ miles farther upstream, and was moved to its present site June 14, 1909.

The station is below all tributaries which head in the Sierra Nevada and is above all diversions.

The station is equipped with an inclined staff gage and a cable and car, 50 feet upstream from the gage.

Flood measurements are made with difficulty owing to the high velocities of the current.

The flow is but little affected by ice. The channel shifts somewhat at each high-water period so that additional measurements must be made to define the low-water curve.

Records are fairly reliable.

Discharge measurements made by the Stone & Webster Engineering Corporation in 1910–1912 have been furnished to the United States Geological Survey for publication.

This station has been maintained in cooperation with the United States Reclamation Service.

*Discharge measurements of Truckee River near Nevada-California State line in 1899–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1899. | | *Feet.* | *Sec.-ft.* | 1906. | | *Feet.* | *Sec.-ft.* |
| Sept. 7 | L. H. Taylor | 2.0 | 303 | July 3 | M. B. Kennedy | 4.95 | 2,710 |
| | | | | 30 | do | 3.10 | 1,000 |
| 1900. | | | | | | | |
| Apr. 10 | L. H. Taylor | 2.9 | 753 | 1907. | | | |
| May 15 | do | 4.1 | 1,493 | May 25 | E. A. Porter | 5.30 | 3,980 |
| 22 | do | 4.3 | 1,629 | June 1 | do | 6.10 | 5,910 |
| June 1 | do | 3.7 | 1,112 | July 16 | do | 4.40 | 2,420 |
| 15 | do | 3.2 | 901 | Aug. 11 | do | 3.60 | 1,630 |
| July 1 | do | 2.5 | 534 | Sept. 20 | do | 3.10 | 1,210 |
| 14 | do | 2.5 | 551 | | | | |
| Sept. 6 | do | 2.3 | 447 | 1908. | | | |
| Oct. 2 | do | 1.9 | 318 | Mar. 11 | E. A. Porter | 2.70 | 874 |
| | | | | Apr. 3 | do | 2.90 | 924 |
| 1901. | | | | 24 | La Rue and Porter | 3.00 | 1,120 |
| Feb. 13 | C. V. Taylor | 1.5 | 296 | June 3 | E. A. Porter | 2.80 | 915 |
| 27 | do | 4.5 | 2,474 | July 10 | M. B. Kennedy | 2.30 | 438 |
| Mar. 11 | do | 3.4 | 1,202 | 22 | E. A. Porter | 2.40 | 604 |
| June 9 | do | 3.9 | 1,741 | Oct. 7 | do | 2.10 | 404 |
| July 13 | do | 2.6 | 811 | | | | |
| Aug. 16 | do | 2.1 | 528 | 1909. | | | |
| Sept. 3 | do | 2.2 | 570 | May 24 | L. J. Towne | 3.82 | 1,670 |
| 14 | do | 2.0 | 478 | 24 | do | 3.92 | 1,550 |
| Nov. 9 | do | 1.95 | 437 | June 11 | do | 4.60 | 2,680 |
| Dec. 14 | do | 1.75 | 353 | July 1 | do | 4.40 | 2,590 |
| | | | | 10 | do | 3.36 | 1,300 |
| 1902. | | | | 22 | do | 2.90 | 708 |
| Apr. 10 | C. V. Taylor | 3.6 | 1,492 | 24 | do | 3.15 | 1,030 |
| May 10 | do | 4.5 | 2,384 | Sept. 14 | F. C. Schafer | 2.40 | 573 |
| | | | | Oct. 19 | do | 2.35 | 546 |
| 1903. | | | | Dec. 4 | do | 3.20 | 1,310 |
| May 1 | H. B. Jameson | 3.95 | 1,915 | | | | |
| 26 | do | 3.00 | 945 | 1910. | | | |
| June 25 | do | 2.90 | 1,070 | Mar. 25 | F. C. Shafer | 3.40 | 1,280 |
| July 18 | do | 2.10 | 457 | Apr. 9 | Stone & Webster Eng. Corp. | 4.11 | 2,020 |
| Aug. 27 | do | 2.10 | 477 | | | | |
| | | | | May 7 | do | 3.30 | 1,200 |
| 1904. | | | | July 1 | do | 2.92 | 815 |
| Apr. 6 | W. A. Wolf | 4.40 | 2,515 | 30 | do | 2.35 | 928 |
| 23 | do | 4.20 | 2,279 | Aug. 29 | do | 2.47 | 479 |
| May 11 | do | 5.73 | 3,892 | 30 | F. C. Schafer | 2.70 | 683 |
| 31 | do | 4.10 | 2,179 | Oct. 15 | H. D. McGlashan | 2.36 | 454 |
| June 14 | do | 4.80 | 2,977 | Nov. 13 | Stone & Webster Eng. Corp. | 2.35 | 420 |
| 18 | do | 4.60 | 2,927 | | | | |
| July 1 | O. F. Heiser | 3.95 | 1,972 | 25 | do | 2.54 | 540 |
| 14 | do | 3.35 | 1,461 | Dec. 16 | D. S. Stuver | 2.44 | 505 |
| Aug. 4 | do | 2.95 | 1,109 | | | | |
| 18 | do | 2.85 | 1,053 | 1911. | | | |
| 31 | W. A. Wolf | 2.70 | 839 | Feb. 26 | H. D. McGlashan | 2.96 | 931 |
| Nov. 19 | do | 2.70 | 658 | Apr. 6 | Stone & Webster Eng. Corp. | 4.92 | 2,980 |
| | | | | | | | |
| 1905. | | | | 9 | J. E. Stewart | 4.90 | 2,930 |
| Apr. 17 | W. A. Wolf | 2.85 | 949 | May 25 | Stone & Webster Eng. Corp. | 5.09 | 3,900 |
| May 13 | do | 2.95 | 1,078 | | | | |
| 26 | do | 3.65 | 1,761 | June 5 | do | 5.78 | 4,920 |
| June 6 | do | 3.06 | 1,170 | 9 | J. E. Stewart | 5.90 | 4,660 |
| 21 | do | 2.80 | 906 | July 15 | Stone & Webster Eng. Corp. | 4.17 | 2,140 |
| July 10 | do | 2.25 | 580 | | | | |
| 18 | do | 2.15 | 544 | Aug. 4 | do | 2.94 | 723 |
| 25 | do | 2.12 | 539 | Oct. 30 | J. E. Stewart | 2.56 | 470 |
| Sept. 13 | do | 1.97 | 416 | | | | |
| | | | | 1912. | | | |
| 1906. | | | | Mar. 19 | Stone & Webster Eng. Corp. | 2.48 | 419 |
| Jan. 24 | C. L. Smith | 2.50 | 759 | | | | |
| May 23 | M. B. Kennedy | 4.60 | 2,480 | June 25 | H. J. Tompkins | 2.51 | 470 |
| June 21 | do | 5.30 | 3,140 | | | | |

NOTE.—After May 24, 1909, gage heights refer to new gage at cable.

*Daily gage height, in feet, of Truckee River near Nevada-California State line, for 1899–1912.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1899–1900. | | | | | | | | | | | | | |
| 1 | ...... | 1.9 | 2.1 | 1.9 | 1.9 | 1.9 | 2.0 | 3.4 | 4.0 | 3.7 | 2.5 | 2.1 | 2.4 |
| 2 | ...... | 1.9 | 2.1 | 1.9 | 2.0 | 1.9 | 1.9 | 3.2 | 4.0 | 3.7 | 2.5 | 2.1 | 2.0 |
| 3 | ...... | 1.9 | 2.0 | 1.9 | 2.8 | 1.9 | 1.9 | [illegible] | 3.8 | [illegible] | 2.5 | 2.1 | 1.9 |
| 4 | ...... | 1.9 | 2.0 | 1.9 | 2.2 | 1.9 | 2.0 | 3.0 | 4.0 | 3.5 | 2.4 | 2.1 | 2.4 |
| 5 | ...... | 1.9 | 2.0 | 1.9 | 2.8 | 1.9 | 2.0 | 3.2 | 4.2 | 3.5 | 2.4 | 2.1 | 2.2 |
| 6 | ...... | 1.9 | 2.6 | 1.8 | 2.7 | 1.8 | 2.0 | 3.2 | 4.0 | 3.7 | 2.4 | 2.1 | 2.3 |
| 7 | 2.0 | 1.9 | 2.8 | 1.8 | 2.5 | 1.8 | 2.2 | 3.2 | [illegible] | 3.7 | 2.4 | 2.1 | 2.2 |
| 8 | 2.0 | 1.9 | 3.2 | 1.8 | 2.1 | 1.8 | 2.4 | 3.2 | 4.3 | 4.0 | 2.4 | 2.1 | 2.1 |
| 9 | 1.9 | 1.9 | 3.8 | 1.9 | 2.0 | 1.8 | 2.5 | 3.2 | 4.4 | 4.0 | 2.4 | 2.1 | 2.1 |
| 10 | 1.9 | 1.9 | 4.0 | 1.9 | 2.0 | 1.8 | 2.6 | 3.2 | 4.0 | 3.7 | 2.4 | 2.1 | 2.1 |
| 11 | 1.9 | 1.9 | 4.2 | 1.9 | 2.0 | 1.8 | 2.6 | 3.2 | 4.0 | 3.7 | 2.4 | 2.1 | 2.1 |
| 12 | 1.9 | 2.0 | 3.5 | 1.9 | 2.0 | 1.9 | 2.3 | 3.0 | 4.0 | 3.6 | 2.4 | 2.1 | 2.2 |
| 13 | 1.9 | 2.0 | 3.0 | 2.0 | 2.1 | 2.0 | 3.0 | 2.9 | 3.5 | 4.0 | 2.4 | 2.1 | 2.2 |
| 14 | 1.9 | 2.0 | 2.7 | 2.0 | 2.0 | 2.0 | 3.4 | 2.9 | 3.5 | 3.7 | 2.4 | 2.1 | 2.3 |
| 15 | 1.9 | 1.9 | 2.9 | 2.0 | 2.2 | 2.0 | 3.6 | 2.9 | 4.3 | 3.2 | 2.4 | 2.1 | 2.3 |
| 16 | 2.1 | 1.9 | 2.7 | 1.9 | 2.2 | 2.0 | 3.4 | 2.9 | 4.4 | 3.2 | 2.4 | 2.1 | 2.3 |
| 17 | 2.0 | 1.9 | 2.7 | 1.9 | 2.2 | 2.0 | 3.4 | 3.0 | 4.4 | 3.2 | 2.3 | 2.1 | 2.3 |
| 18 | 1.9 | 1.9 | 2.5 | 1.9 | 2.2 | 2.0 | 3.2 | 3.0 | 4.5 | 3.2 | 2.2 | 2.1 | 2.3 |
| 19 | 1.9 | 1.9 | 2.5 | 1.9 | 2.2 | 2.0 | 3.4 | 3.4 | 4.5 | 3.1 | 2.2 | 2.2 | 2.3 |
| 20 | 1.9 | 2.4 | 2.5 | 1.9 | 2.2 | 2.1 | 3.4 | 3.0 | 4.6 | 3.0 | 2.3 | 2.2 | 2.3 |
| 21 | 1.9 | 2.5 | 2.2 | 1.9 | 2.0 | 2.1 | 3.6 | 3.6 | 4.4 | 3.0 | 2.3 | 2.2 | 2.1 |
| 22 | 1.9 | 2.7 | 2.1 | 1.9 | 2.0 | 2.1 | 3.5 | 3.5 | 4.3 | 2.9 | 2.3 | 2.4 | 2.0 |
| 23 | 1.9 | 2.5 | 2.0 | 1.9 | 1.9 | 2.1 | 3.4 | [illegible] | 4.4 | 3.0 | 2.3 | 2.4 | 2.0 |
| 24 | 2.0 | 2.4 | 2.0 | 1.9 | 1.9 | 2.1 | 3.4 | 3.0 | 4.0 | 2.9 | 2.3 | 2.4 | 1.9 |
| 25 | 1.9 | 2.3 | 2.0 | 1.9 | 1.9 | 2.1 | 3.4 | 3.3 | 4.0 | 2.7 | 2.3 | 2.4 | 1.9 |
| 26 | 1.9 | 2.2 | 2.0 | 1.9 | 1.9 | 2.1 | 3.6 | 3.5 | 4.0 | 2.7 | 2.2 | 2.0 | 1.9 |
| 27 | 1.9 | [illegible] | 2.0 | 1.9 | 1.9 | 2.1 | 3.6 | [illegible] | 3.8 | 2.6 | 2.2 | 2.2 | 2.0 |
| 28 | 1.9 | 2.0 | 2.0 | 1.9 | 1.9 | 2.1 | 3.4 | 3.0 | 3.5 | 2.6 | 2.2 | 2.2 | 1.7 |
| 29 | 1.9 | 2.0 | 1.9 | 1.9 | 1.9 | ...... | 3.4 | 3.4 | 3.8 | 2.6 | 2.2 | 2.4 | 1.9 |
| 30 | 1.9 | [illegible] | 1.9 | 1.9 | 1.9 | ...... | 3.4 | 4.0 | 3.7 | 2.6 | 2.2 | 2.4 | 2.1 |
| 31 | ...... | 2.1 | ...... | 1.9 | 1.9 | ...... | 3.4 | ...... | 3.7 | ...... | 2.2 | 2.4 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901. | | | | | | | | | | | | |
| 1 | 2.3 | 2.3 | 1.6 | 1.5 | 1.3 | 4.2 | 2.7 | 4.0 | 4.3 | 3.2 | 2.0 | 2.0 |
| 2 | 2.0 | 2.0 | 1.6 | 1.5 | 1.5 | 4.4 | 3.1 | 3.7 | 4.5 | 3.2 | 2.1 | 2.1 |
| 3 | 2.1 | 2.0 | 1.6 | 1.5 | 1.4 | 3.9 | 2.8 | 3.6 | 4.9 | 3.1 | 1.9 | 2.1 |
| 4 | 2.1 | 2.4 | 1.8 | 1.8 | 1.4 | 3.9 | 2.5 | 3.7 | 4.5 | 2.8 | 1.8 | 2.1 |
| 5 | 2.2 | 2.4 | 1.8 | [illegible] | 1.5 | 3.9 | 2.9 | 3.3 | 4.3 | 2.5 | 1.7 | 2.2 |
| 6 | 2.2 | 2.4 | 1.8 | 2.2 | 1.4 | 3.9 | 2.5 | 4.3 | 4.2 | 2.5 | 2.0 | 2.1 |
| 7 | 2.3 | 2.7 | 2.0 | 2.3 | 1.5 | 4.0 | 2.5 | 4.7 | 4.3 | 2.5 | 2.1 | 2.1 |
| 8 | 2.2 | 2.5 | 2.2 | 1.7 | 1.5 | 3.7 | 2.5 | 4.7 | 4.3 | 2.4 | 2.1 | 1.8 |
| 9 | 2.2 | 2.4 | 2.2 | 1.6 | 1.4 | 3.8 | 2.5 | 4.8 | 4.0 | 2.4 | 1.9 | 1.8 |
| 10 | 2.1 | 2.4 | 2.2 | 1.6 | 1.5 | 3.5 | 2.3 | 4.5 | 3.7 | 2.5 | 2.0 | 2.1 |
| 11 | 2.0 | 2.4 | 2.2 | 1.6 | 1.4 | 3.4 | 2.5 | 4.7 | 3.5 | 2.4 | 1.9 | 2.1 |
| 12 | 2.0 | 2.4 | 2.2 | 1.9 | 1.3 | 3.2 | 3.1 | 5.3 | 3.4 | 2.4 | 1.9 | 2.1 |
| 13 | 2.0 | 2.4 | 2.2 | 1.5 | 1.5 | 3.0 | 2.3 | 5.7 | 3.3 | 2.5 | 1.9 | 2.2 |
| 14 | 2.0 | 2.3 | 2.0 | 1.4 | 1.5 | 2.7 | 3.5 | 5.7 | 3.1 | 2.4 | 1.9 | 1.9 |
| 15 | 2.0 | 2.2 | 2.0 | 1.5 | 1.6 | 2.9 | 3.8 | 5.5 | 3.3 | 2.4 | 1.9 | 1.8 |
| 16 | 2.3 | 2.2 | 2.0 | 1.5 | 1.6 | 2.9 | 3.8 | 5.5 | 3.4 | 2.3 | 1.8 | 1.7 |
| 17 | 1.7 | 2.2 | 2.0 | 1.4 | 2.1 | 2.9 | 3.7 | 5.6 | 3.3 | 2.4 | 2.5 | 2.0 |
| 18 | 2.0 | 2.2 | 2.2 | 1.4 | 3.2 | 2.5 | 4.0 | 5.7 | 3.5 | 2.3 | 2.6 | 2.0 |
| 19 | 2.3 | 2.2 | 2.4 | 1.5 | 3.2 | 2.8 | 4.1 | 5.1 | 3.6 | 2.2 | 2.6 | 2.0 |
| 20 | 3.2 | 2.2 | 3.6 | 1.4 | 5.0 | 2.9 | 4.3 | 4.9 | 3.6 | 2.3 | 2.1 | 2.1 |
| 21 | [illegible] | 2.5 | 3.0 | 1.6 | 5.3 | 2.9 | 4.3 | 4.2 | 3.6 | 2.1 | 2.1 | 2.0 |
| 22 | 3.1 | 3.2 | 3.1 | 1.9 | 4.1 | 3.3 | 4.3 | 3.9 | 3.4 | 2.3 | 1.8 | 2.0 |
| 23 | 2.1 | 3.0 | 2.1 | 1.5 | 4.7 | 3.2 | 4.1 | 3.8 | 3.5 | 2.3 | 1.8 | 2.0 |
| 24 | 2.9 | 2.8 | 2.0 | 1.5 | 4.5 | 3.1 | 4.1 | 3.8 | 3.4 | 2.3 | 2.0 | 2.1 |
| 25 | 2.8 | 2.5 | 2.2 | 1.6 | 4.3 | 3.1 | 4.6 | 3.8 | 3.1 | 2.3 | 2.1 | 2.2 |
| 26 | 2.8 | 2.5 | 2.2 | 1.5 | 4.4 | 3.2 | 4.4 | 3.8 | 3.0 | 2.3 | 2.0 | 2.0 |
| 27 | 2.7 | 2.3 | 2.0 | 1.5 | 4.5 | 3.1 | 4.1 | 3.7 | 2.9 | 2.2 | 2.1 | 2.0 |
| 28 | 2.7 | 2.1 | 2.1 | 1.6 | 4.4 | 3.1 | 4.2 | 3.9 | 3.2 | 2.0 | 2.2 | 2.0 |
| 29 | 2.6 | 2.0 | 2.1 | 1.7 | ...... | 2.7 | 4.3 | 3.8 | 3.3 | 2.3 | 2.9 | 2.0 |
| 30 | 2.0 | 2.0 | 2.2 | 1.4 | ...... | 2.5 | 4.1 | 4.0 | 3.4 | 2.1 | 2.0 | 2.1 |
| 31 | 2.4 | ...... | 2.1 | [illegible] | ...... | 2.7 | ...... | 4.1 | ...... | 1.9 | 2.1 | ...... |

*Daily gage height, in feet, of Truckee River near Nevada-California State line, for 1899–1912*—Continued.

| Day. | Oct. | Nov | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1901-2.** | | | | | | | | | | | | |
| 1 | 2.0 | 2.2 | 2.3 | 1.5 | 1.4 | 2.1 | 2.2 | 3.4 | 3.7 | 2.4 | 2.1 | 2.2 |
| 2 | 2.0 | 2.1 | 2.3 | 1.9 | 1.6 | 2.1 | 2.1 | 3.3 | 3.7 | 2.2 | 2.1 | 2.2 |
| 3 | 2.1 | 1.8 | 3.0 | 1.8 | 1.6 | 1.9 | 2.2 | 3.2 | 3.5 | 2.2 | 2.1 | 2.2 |
| 4 | 2.1 | 1.9 | 5.2 | 1.6 | 1.6 | 2.0 | 2.2 | 3.2 | 3.5 | 3.0 | 2.1 | 2.2 |
| 5 | 2.1 | 2.0 | 2.6 | 1.5 | 1.7 | 2.1 | 2.5 | 3.3 | 3.4 | 2.1 | 2.0 | 2.2 |
| 6 | 2.0 | 2.1 | 2.7 | 1.6 | 1.6 | 2.4 | 3.2 | 3.9 | 3.5 | 2.1 | 2.0 | 2.1 |
| 7 | 2.0 | 2.0 | 2.3 | 1.5 | 1.7 | 1.9 | 5.0 | 4.4 | 3.9 | 2.1 | 2.0 | 2.2 |
| 8 | 2.0 | 2.0 | 2.1 | 1.5 | 1.8 | 1.9 | 4.0 | 4.8 | 3.9 | 2.1 | 2.0 | 2.1 |
| 9 | 2.1 | 2.0 | 2.1 | 1.6 | 1.8 | 1.8 | 4.1 | 4.8 | 4.0 | 1.7 | 2.0 | 2.0 |
| 10 | 2.2 | 1.9 | 2.0 | 1.5 | 2.1 | 1.5 | 3.7 | 4.7 | 4.1 | 2.0 | 1.8 | 2.0 |
| 11 | 2.2 | 2.0 | 1.7 | 1.4 | 2.1 | 1.6 | 3.4 | 4.8 | 4.0 | 2.1 | 2.1 | 2.0 |
| 12 | 2.0 | 2.0 | 1.5 | 1.5 | 1.8 | 1.6 | 3.5 | 4.7 | 3.9 | 2.0 | 2.1 | 2.0 |
| 13 | 1.3 | 2.1 | 1.4 | 1.6 | 1.5 | 2.0 | 3.6 | 4.5 | 3.9 | 1.9 | 2.0 | 2.2 |
| 14 | 2.0 | 2.0 | 1.8 | 1.7 | 1.8 | 1.7 | 4.1 | 4.0 | 3.9 | 1.9 | 2.1 | 2.1 |
| 15 | 2.0 | 2.0 | 1.6 | 1.5 | 2.4 | 1.6 | 4.3 | 4.0 | 3.5 | 2.0 | 2.2 | 2.0 |
| 16 | 2.0 | 2.0 | 1.5 | 1.6 | 2.5 | 1.5 | 4.2 | 4.0 | 3.3 | 2.0 | 2.2 | 1.9 |
| 17 | 1.9 | 1.9 | 1.5 | 1.6 | 3.2 | 1.6 | 4.5 | 4.1 | 3.3 | 1.9 | 2.1 | 1.9 |
| 18 | 1.9 | 2.0 | 1.5 | 1.8 | 2.5 | 1.7 | 5.0 | 4.0 | 3.2 | 1.9 | 2.1 | 2.0 |
| 19 | 2.0 | 2.0 | 1.6 | 1.5 | 2.3 | 1.8 | 5.4 | 3.8 | 3.2 | 1.9 | 2.1 | 2.0 |
| 20 | 1.5 | 2.0 | 1.5 | 1.5 | 2.3 | 1.8 | 5.0 | 3.5 | 3.2 | 1.9 | 2.1 | 1.9 |
| 21 | 1.9 | 2.0 | 1.4 | 1.5 | 2.2 | 1.9 | 4.3 | 3.4 | 3.2 | 1.8 | 2.1 | 2.0 |
| 22 | 1.9 | 1.9 | 1.7 | 1.5 | 2.0 | 1.7 | 3.8 | 3.3 | 3.2 | 1.9 | 2.0 | 2.0 |
| 23 | 1.9 | 1.9 | 1.8 | 1.5 | 2.0 | 1.7 | 3.8 | 3.4 | 3.0 | 1.8 | 2.1 | 2.0 |
| 24 | 1.9 | 1.9 | 1.8 | 1.7 | 2.9 | 1.5 | 3.4 | 3.5 | 3.1 | 2.1 | 2.1 | 2.0 |
| 25 | 2.0 | 2.0 | 1.6 | 1.6 | 2.4 | 1.7 | 3.4 | 4.0 | 3.1 | 2.2 | 2.1 | 1.9 |
| 26 | 2.0 | 2.1 | 1.3 | 1.4 | 2.0 | 1.7 | 3.3 | 4.2 | 2.8 | 2.2 | 2.1 | 1.9 |
| 27 | 2.2 | 2.0 | 1.5 | 1.7 | 2.0 | 1.7 | 3.2 | 4.6 | 2.8 | 2.2 | 2.2 | 1.9 |
| 28 | 2.2 | 2.0 | 1.5 | 1.8 | 2.0 | 2.0 | 3.2 | 4.3 | 2.6 | 2.2 | 2.2 | 2.0 |
| 29 | 2.2 | 2.2 | 1.5 | 1.8 | ...... | 2.0 | 3.4 | 4.7 | 2.5 | 1.9 | 2.2 | 2.0 |
| 30 | 2.2 | 2.3 | 1.7 | 1.7 | ...... | 2.0 | 3.5 | 4.4 | 2.5 | 2.1 | 2.2 | 2.0 |
| 31 | 2.2 | ...... | 1.5 | 1.7 | ...... | 2.1 | ...... | 4.2 | ...... | 2.2 | 2.2 | ...... |
| **1902-3.** | | | | | | | | | | | | |
| 1 | 1.9 | 1.9 | 1.9 | 2.10 | 1.57 | 1.65 | 4.10 | 4.00 | 3.96 | 2.68 | 2.06 | 2.15 |
| 2 | 2.0 | 1.8 | 2.0 | 2.00 | 2.25 | 1.80 | 3.10 | 4.10 | 3.90 | 2.60 | 2.02 | 2.02 |
| 3 | 1.9 | 1.9 | 2.0 | 1.95 | 2.00 | 1.80 | 3.10 | 4.00 | 3.62 | 2.40 | 2.08 | 1.98 |
| 4 | 1.9 | 1.8 | 2.1 | 2.05 | 2.20 | 1.90 | 3.10 | 4.10 | 3.55 | 2.22 | 2.00 | 2.15 |
| 5 | 1.9 | 1.9 | 2.1 | 2.25 | 2.10 | 2.00 | 2.80 | 4.22 | 3.55 | 2.15 | 2.00 | 2.08 |
| 6 | 1.8 | 1.9 | 2.1 | 2.25 | 1.90 | 1.80 | 2.80 | 4.50 | 3.50 | 2.15 | 2.02 | 2.10 |
| 7 | 1.9 | 1.8 | 2.2 | 2.15 | 2.00 | 1.80 | 2.75 | 4.35 | 3.47 | 2.10 | 2.00 | 2.10 |
| 8 | 2.1 | 1.9 | 2.1 | 2.25 | 2.05 | 2.10 | 3.30 | 4.17 | 3.52 | 2.00 | 2.00 | 2.15 |
| 9 | 1.9 | 1.9 | 2.2 | 2.25 | 2.25 | 1.90 | 3.52 | 4.25 | 3.47 | 2.00 | 2.00 | 2.10 |
| 10 | 1.9 | 2.2 | 2.4 | 2.00 | 1.80 | 2.00 | 3.80 | 4.15 | 3.52 | 2.20 | 2.00 | 2.12 |
| 11 | 2.0 | 2.5 | 2.2 | 2.10 | 1.95 | 2.00 | 3.30 | 4.15 | 3.50 | 2.08 | 2.00 | 2.12 |
| 12 | 2.0 | 1.9 | 2.3 | 1.90 | 2.10 | 2.00 | 3.25 | 4.30 | 3.37 | 2.00 | 2.00 | 2.08 |
| 13 | 2.0 | 1.9 | 2.0 | 1.90 | 2.25 | 1.85 | 3.00 | 4.40 | 3.37 | 2.00 | 2.00 | 2.10 |
| 14 | 2.0 | 1.9 | 1.8 | 1.90 | 2.20 | 2.00 | 3.00 | 4.22 | 3.20 | 2.10 | 2.00 | 2.10 |
| 15 | 1.9 | 2.1 | 1.8 | 1.60 | 2.05 | 2.00 | 3.25 | 4.07 | 2.88 | 2.00 | 2.00 | 2.20 |
| 16 | 1.9 | 1.9 | 2.0 | 1.85 | 2.00 | 1.95 | 3.05 | 4.12 | 2.75 | 2.00 | 2.00 | 2.08 |
| 17 | 1.9 | 2.1 | 1.8 | 1.90 | 2.20 | 1.95 | 3.00 | 3.72 | 2.72 | 2.00 | 2.00 | 2.20 |
| 18 | 1.9 | 1.9 | 1.9 | 1.50 | 2.20 | 1.95 | 3.00 | 3.50 | 2.75 | 2.05 | 2.00 | 2.05 |
| 19 | 1.9 | 1.8 | 1.8 | 1.75 | 2.00 | 1.90 | 3.00 | 3.00 | 2.80 | 1.98 | 2.00 | 2.00 |
| 20 | 1.9 | 1.9 | 2.0 | 1.95 | 2.00 | 2.00 | 3.00 | 3.10 | 2.70 | 2.00 | 2.10 | 2.00 |
| 21 | 1.9 | 2.1 | 2.1 | 1.90 | 2.10 | 2.10 | 3.20 | 3.12 | 2.72 | 2.02 | 2.08 | 2.05 |
| 22 | 1.9 | 1.7 | 2.1 | 1.95 | 2.10 | 2.10 | 3.30 | 3.15 | 2.82 | 2.25 | 2.10 | 2.00 |
| 23 | 1.9 | 1.7 | 2.1 | 1.87 | 2.00 | 2.15 | 3.50 | 3.05 | 2.70 | 2.00 | 2.10 | 2.00 |
| 24 | 2.2 | 1.5 | 2.1 | 2.55 | 1.75 | 2.10 | 3.80 | 2.87 | 2.48 | 2.00 | 2.10 | 2.02 |
| 25 | 2.2 | 1.7 | 2.1 | 2.90 | 1.55 | 2.15 | 4.10 | 2.87 | 2.78 | 2.00 | 2.02 | 2.00 |
| 26 | 2.2 | 1.7 | 1.9 | 2.50 | 1.45 | 2.15 | 4.00 | 2.97 | 2.55 | 2.00 | 2.02 | 1.90 |
| 27 | 2.1 | 1.6 | 1.9 | 2.65 | 1.65 | 2.30 | 3.67 | 3.00 | 2.82 | 2.00 | 2.15 | 1.90 |
| 28 | 2.1 | 1.6 | 1.9 | 2.20 | 1.70 | 3.05 | 3.47 | 3.05 | 2.60 | 2.00 | 2.30 | 1.90 |
| 29 | 2.0 | 1.8 | 1.9 | 2.55 | ...... | 4.05 | 3.42 | 3.30 | 2.80 | 2.00 | 2.20 | 2.00 |
| 30 | 1.9 | 1.8 | 2.1 | 2.25 | ...... | 5.15 | 3.80 | 3.62 | 2.75 | 2.00 | 2.15 | 2.00 |
| 31 | 1.9 | ...... | 2.1 | 1.90 | ...... | 4.75 | ...... | 3.97 | ...... | 2.00 | 2.25 | ...... |

[illegible] Continued.

| [illegible] | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .... | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .... | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .... | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.40 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.30 | [illegible] | .... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.40 | .... | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.70 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.90 | 2.70 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible].25 | 2.90 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.90 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.15 | 2.75 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 2.75 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 2.70 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible].25 | [illegible] | .... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .... |

*Daily gage height, in feet, of Truckee River near Nevada-California State line, for 1899–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905-6. | | | | | | | | | | | | |
| 6 | 2.15 | 1.97 | 1.80 | 1.75 | 2.35 | 2.50 | 3.35 | 7.08 | 4.65 | 4.98 | 2.60 | 2.68 |
| 7 | 2.10 | 1.85 | 1.90 | 1.75 | 2.35 | 2.50 | 3.50 | 7.16 | 4.45 | 4.60 | 2.65 | 2.65 |
| 8 | 2.05 | 1.90 | 1.90 | 1.85 | 2.30 | 2.55 | 3.90 | 7.15 | 4.30 | 4.68 | 2.60 | 2.65 |
| 9 | 2.10 | 1.95 | 1.90 | 1.95 | 2.30 | 2.60 | 4.20 | 7.16 | 4.88 | 4.50 | 2.65 | 2.65 |
| 10 | 2.10 | 1.95 | 1.90 | 2.00 | 2.30 | 2.72 | 4.22 | 6.85 | 5.25 | 4.25 | 2.70 | 2.65 |
| 11 | 2.20 | 1.95 | 1.90 | 1.95 | 2.30 | 2.85 | 3.98 | 6.98 | 6.25 | 4.20 | 2.80 | 2.65 |
| 12 | 2.15 | 1.87 | 1.85 | 1.98 | 2.48 | 3.72 | 4.00 | 6.60 | 5.90 | 4.20 | 2.85 | 2.68 |
| 13 | 2.10 | 1.95 | 1.92 | 2.00 | 2.40 | 3.05 | 4.10 | 6.35 | 5.20 | 4.22 | 2.90 | 2.65 |
| 14 | 2.10 | 1.70 | 1.87 | 1.98 | 2.38 | 2.76 | 4.28 | 6.40 | 5.05 | 4.20 | 2.80 | 2.65 |
| 15 | 2.05 | 1.70 | 1.97 | 2.05 | 2.52 | 2.82 | 4.55 | 6.25 | 5.10 | 4.00 | 2.80 | 2.65 |
| 16 | 2.05 | 1.85 | 1.87 | 2.18 | 2.52 | 2.80 | 6.95 | 5.88 | 5.55 | 3.86 | 2.80 | 2.68 |
| 17 | 2.05 | 1.98 | 1.90 | 2.22 | 2.52 | 2.80 | 6.00 | 5.66 | 5.55 | 3.70 | 2.70 | 2.65 |
| 18 | 2.05 | 1.97 | 1.77 | 2.90 | 2.55 | 2.78 | 5.98 | 5.25 | 5.02 | 3.42 | 2.80 | 2.65 |
| 19 | 2.05 | 1.80 | 1.80 | 3.18 | 2.85 | 2.82 | 6.06 | 4.80 | 5.22 | 3.60 | 2.75 | 2.62 |
| 20 | 2.05 | 1.95 | 1.80 | 2.80 | 2.90 | 2.78 | 6.05 | 4.88 | 5.32 | 3.50 | 2.85 | 2.65 |
| 21 | 2.10 | 1.97 | 1.70 | 2.68 | 2.70 | 2.85 | 6.60 | 4.70 | 5.50 | 3.45 | 2.80 | 2.62 |
| 22 | 2.05 | 2.00 | 1.70 | 2.68 | 2.72 | 3.15 | 6.80 | 4.78 | 5.35 | 3.40 | 2.85 | 2.60 |
| 23 | 2.05 | 1.97 | 1.80 | 2.62 | 2.70 | 3.25 | 6.75 | 4.62 | 5.30 | 3.40 | 2.78 | 2.66 |
| 24 | 2.20 | 2.00 | 1.80 | 2.58 | 2.70 | 3.45 | 5.90 | 4.40 | 5.30 | 3.35 | 2.78 | 2.65 |
| 25 | 2.00 | 1.95 | 1.80 | 2.52 | 2.68 | 3.52 | 5.70 | 4.40 | 5.02 | 3.35 | 2.75 | 2.65 |
| 26 | 2.02 | 1.90 | 1.82 | 2.50 | 2.68 | 3.50 | 5.98 | 4.82 | 4.92 | 3.08 | 2.75 | 2.62 |
| 27 | 2.00 | 1.85 | 1.82 | 2.50 | 2.68 | 3.40 | 5.82 | 4.55 | 4.90 | 3.30 | 2.75 | 2.62 |
| 28 | 2.02 | 1.90 | 1.80 | 2.48 | 2.70 | 3.48 | 4.70 | 4.30 | 4.45 | 3.30 | 2.80 | 2.62 |
| 29 | 2.02 | 1.95 | 1.82 | 2.42 | ...... | 3.40 | 4.35 | 4.02 | 4.28 | 3.15 | 2.80 | 2.60 |
| 30 | 2.00 | 1.95 | 1.78 | 2.35 | ...... | 3.45 | 4.80 | 3.92 | 4.30 | 3.05 | 2.80 | 2.60 |
| 31 | 2.50 | ...... | 1.75 | 2.20 | ...... | 3.90 | ...... | 3.80 | ...... | 3.00 | 2.75 | ...... |
| 1906-7. | | | | | | | | | | | | |
| 1 | 2.35 | 2.75 | 2.50 | 2.65 | 2.9 | 3.1 | 4.2 | 5.6 | 6.15 | 5.25 | 4.05 | 3.4 |
| 2 | 2.38 | 2.65 | 2.48 | 2.65 | 3.7 | 3.1 | 4.3 | 5.7 | 6.15 | 5.1 | 3.95 | 3.4 |
| 3 | 2.50 | 2.65 | 2.48 | 2.7 | 3.8 | 3.1 | 4.3 | 5.7 | 6.05 | 5.25 | 3.95 | 3.4 |
| 4 | 2.50 | 2.98 | 2.52 | 2.7 | 3.95 | 3.1 | 4.2 | 5.55 | 6.05 | 5.4 | 3.85 | 3.45 |
| 5 | 2.48 | 2.78 | 2.50 | 2.7 | 4.05 | 3.15 | 4.2 | 5.15 | 5.9 | 5.05 | 3.85 | 3.4 |
| 6 | 2.48 | 2.70 | 2.45 | 2.7 | 3.8 | 3.15 | 4.0 | 5.1 | 5.75 | 5.0 | 3.8 | 3.4 |
| 7 | 2.50 | 2.68 | 2.45 | 2.6 | 3.7 | 3.1 | 4.1 | 5.2 | 5.55 | 4.95 | 3.8 | 3.4 |
| 8 | 2.50 | 2.65 | 2.48 | 2.65 | 3.4 | 3.1 | 4.2 | 5.15 | 5.25 | 4.8 | 3.75 | 3.4 |
| 9 | 2.50 | 2.68 | 2.45 | 2.65 | 3.35 | 3.1 | 4.3 | 5.3 | 5.25 | 4.8 | 3.7 | 3.4 |
| 10 | 2.58 | 2.68 | 2.68 | 2.7 | 3.3 | 3.1 | 4.9 | 5.6 | 5.25 | 4.75 | 3.65 | 3.4 |
| 11 | 2.75 | 2.70 | 2.60 | 2.7 | 3.25 | 3.0 | 5.2 | 6.0 | 5.45 | 4.75 | 3.6 | 3.4 |
| 12 | 2.65 | 2.65 | 2.62 | 2.65 | 3.25 | 3.1 | 5.5 | 5.7 | 5.5 | 4.75 | 3.6 | 3.4 |
| 13 | 2.72 | 2.70 | 2.65 | 2.7 | 3.25 | 3.05 | 6.15 | 5.15 | 4.95 | 4.55 | 3.55 | 3.4 |
| 14 | 2.75 | 2.68 | 2.65 | 2.7 | 3.25 | 3.0 | 7.0 | 5.0 | 4.8 | 4.5 | 3.5 | 3.35 |
| 15 | 2.68 | 2.70 | 2.65 | 2.7 | 3.25 | 3.05 | 5.9 | 5.2 | 4.65 | 4.5 | 3.6 | 3.3 |
| 16 | 2.65 | 2.70 | 2.60 | 2.7 | 3.25 | 3.1 | 5.5 | 5.45 | 4.5 | 4.45 | 3.6 | 3.3 |
| 17 | 2.65 | 2.65 | 2.58 | 2.65 | 3.2 | 5.35 | 5.65 | 5.65 | 4.45 | 4.4 | 3.55 | 3.3 |
| 18 | 2.65 | 2.65 | 2.60 | 2.65 | 3.2 | 11.5 | 5.8 | 5.9 | 4.55 | 4.4 | 3.5 | 3.3 |
| 19 | 2.65 | 2.60 | 2.60 | 2.6 | 3.2 | 8.1 | 6.0 | 6.3 | 4.7 | 4.4 | 3.5 | 3.3 |
| 20 | 2.62 | 2.55 | 2.60 | 2.65 | 3.15 | 7.3 | 6.0 | 6.15 | 5.0 | 4.4 | 3.5 | 3.3 |
| 21 | 2.65 | 2.60 | 2.60 | 2.6 | 3.2 | 6.25 | 5.8 | 5.75 | 5.0 | 4.25 | 3.5 | 3.3 |
| 22 | 2.52 | 2.60 | 2.60 | 2.65 | 3.3 | 5.85 | 5.85 | 5.55 | 5.2 | 4.15 | 3.5 | 3.3 |
| 23 | 2.52 | 2.58 | 2.60 | 2.65 | 3.25 | 4.75 | 6.15 | 5.2 | 5.15 | 4.2 | 3.45 | 3.3 |
| 24 | 2.60 | 2.50 | 2.62 | 2.6 | 3.25 | 4.3 | 6.3 | 5.2 | 4.9 | 4.15 | 3.4 | 3.3 |
| 25 | 2.60 | 2.50 | 2.68 | 2.6 | 3.25 | 4.25 | 6.2 | 5.2 | 4.75 | 4.1 | 3.4 | 3.3 |
| 26 | 2.62 | 2.55 | 2.98 | 2.6 | 3.2 | 4.2 | 6.15 | 5.2 | 4.8 | 4.1 | 3.4 | 3.3 |
| 27 | 2.70 | 2.50 | 2.92 | 2.7 | 3.2 | 4.05 | 6.1 | 5.3 | 5.0 | 4.2 | 3.65 | 3.3 |
| 28 | 2.45 | 2.45 | 2.85 | 2.9 | 3.2 | 4.0 | 6.0 | 5.45 | 5.25 | 4.2 | 3.4 | 3.25 |
| 29 | 2.42 | 2.52 | 2.80 | 2.85 | ...... | 4.0 | 5.85 | 5.6 | 5.15 | 4.2 | 3.4 | 3.2 |
| 30 | 2.55 | 2.52 | 2.78 | 2.85 | ...... | 4.0 | 5.65 | 5.75 | 5.15 | 4.15 | 3.4 | 3.2 |
| 31 | 2.62 | ...... | 2.75 | 2.85 | ...... | 4.1 | ...... | 6.05 | ...... | 4.1 | 3.4 | ...... |
| 1907-8. | | | | | | | | | | | | |
| 1 | 3.2 | 3.1 | 2.8 | 2.8 | 2.9 | 2.8 | 2.9 | 3.4 | 2.85 | 2.4 | 2.4 | 2.2 |
| 2 | 3.3 | 3.1 | 2.8 | 2.8 | 2.8 | 2.8 | 2.9 | 3.45 | 2.8 | 2.3 | 2.4 | 2.2 |
| 3 | 3.2 | 3.1 | 2.8 | 2.8 | 3.0 | 2.8 | 2.9 | 3.1 | 2.7 | 2.25 | 2.6 | 2.2 |
| 4 | 2.45 | 3.1 | 2.8 | 2.8 | 2.8 | 2.8 | 3.05 | 2.95 | 2.65 | 2.2 | 2.2 | 2.15 |
| 5 | 3.2 | 3.0 | 2.9 | 2.8 | 2.8 | 2.8 | 3.15 | 2.9 | 2.75 | 2.8 | 2.2 | 2.1 |
| 6 | 2.4 | 3.0 | 3.0 | 2.8 | 2.8 | 2.75 | 3.25 | 3.0 | 2.8 | 2.2 | 2.2 | 2.0 |
| 7 | 2.4 | 2.75 | 3.0 | 2.8 | 2.8 | 2.7 | 3.05 | 3.2 | 2.9 | 2.2 | 2.4 | 2.2 |
| 8 | 2.4 | 2.7 | 2.9 | 2.8 | 2.8 | 2.7 | 2.8 | 2.95 | 3.05 | 2.3 | 2.4 | 2.2 |
| 9 | 3.1 | 2.9 | 2.9 | 2.85 | 2.8 | 2.8 | 2.95 | 2.8 | 3.05 | 2.35 | 2.4 | 2.2 |
| 10 | 3.25 | 3.0 | 2.9 | 2.85 | 2.8 | 2.8 | 3.1 | 2.8 | 3.1 | 2.3 | 2.4 | 2.1 |

61[illegible]52

*Daily discharge, in second-feet, of Truckee River at Tahoe, Cal., for 1909–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 456 | 438 | 258 | 890 | 247 | 819 | 114 | 318 | 134 | 381 | 701 | 534 |
| 2 | 456 | 456 | 287 | 898 | 518 | 819 | 114 | 318 | 134 | 419 | 701 | 534 |
| 3 | 449 | 419 | 350 | 898 | 777 | 819 | 114 | 270 | 134 | 785 | 680 | 534 |
| 4 | 449 | 367 | 350 | 898 | 827 | 819 | 114 | 156 | 134 | 722 | 680 | 494 |
| 5 | 449 | 367 | 350 | 898 | 827 | 819 | 114 | 156 | 134 | 722 | 680 | 494 |
| 6 | 449 | 367 | 367 | 898 | 827 | 819 | 114 | 156 | 134 | 722 | 680 | 494 |
| 7 | 445 | 367 | 367 | 898 | 827 | 819 | 114 | 156 | 212 | 722 | 680 | 486 |
| 8 | 438 | 367 | 426 | 898 | 827 | 810 | 114 | 156 | 244 | 722 | 680 | 483 |
| 9 | 419 | 367 | 494 | 898 | 827 | 806 | 114 | 156 | 364 | 722 | 659 | 475 |
| 10 | 412 | 367 | 494 | 898 | 827 | 802 | 114 | 156 | 315 | 642 | 651 | 475 |
| 11 | 416 | 367 | 494 | 898 | 827 | 798 | 114 | 156 | 315 | 642 | 419 | 475 |
| 12 | 416 | 367 | 494 | 898 | 827 | 793 | 114 | 136 | 534 | 642 | 651 | 456 |
| 13 | 412 | 367 | 522 | 890 | 827 | 108 | 114 | 114 | 318 | 642 | 651 | 456 |
| 14 | 419 | 367 | 554 | 890 | 827 | 114 | 114 | 114 | 309 | 642 | 651 | 438 |
| 15 | 419 | 367 | 583 | 890 | 827 | 114 | 114 | 114 | 510 | 642 | 651 | 438 |
| 16 | 419 | 367 | 617 | 886 | 827 | 114 | 114 | 114 | 324 | 743 | 642 | 438 |
| 17 | 419 | 364 | 638 | 886 | 827 | 247 | 114 | 114 | 381 | 743 | 634 | 438 |
| 18 | 416 | 364 | 659 | 877 | 827 | 426 | 114 | 114 | 344 | 743 | 625 | 438 |
| 19 | 258 | 364 | 659 | 877 | 827 | 114 | 114 | 114 | 344 | 743 | 617 | 438 |
| 20 | 258 | 367 | 659 | 873 | 823 | 114 | 114 | 114 | 344 | 402 | 617 | 350 |
| 21 | 412 | 367 | 659 | 869 | 819 | 114 | 114 | 114 | 344 | 456 | 617 | 364 |
| 22 | 408 | 367 | 655 | 869 | 819 | 114 | 114 | 124 | 344 | 456 | 609 | 357 |
| 23 | 405 | 367 | 655 | 869 | 819 | 114 | 114 | 124 | 430 | 688 | 609 | 337 |
| 24 | 402 | 367 | 651 | 869 | 819 | 114 | 114 | 124 | 405 | 701 | 609 | 337 |
| 25 | 394 | 367 | 651 | 869 | 819 | 114 | 114 | 124 | 405 | 701 | 600 | 402 |
| 26 | 388 | 367 | 651 | 869 | 819 | 114 | 209 | 124 | 743 | 701 | 596 | 391 |
| 27 | 384 | 367 | 646 | 869 | 814 | 114 | 494 | 124 | 438 | 701 | 596 | 384 |
| 28 | 419 | 367 | 638 | 869 | 819 | 114 | 494 | 124 | 438 | 701 | 596 | 384 |
| 29 | 449 | 367 | 798 | 869 | ...... | 114 | 209 | 124 | 381 | 701 | 588 | 384 |
| 30 | 475 | 367 | 798 | 869 | ...... | 114 | 318 | 134 | 381 | 701 | 554 | 384 |
| 31 | 384 | ...... | 890 | 861 | ...... | 114 | ...... | 134 | ...... | 701 | 534 | ...... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 377 | 281 | 302 | 241 | 267 | 676 | 651 | 145 | 158 | 848 | 350 | 449 |
| 2 | 377 | 281 | 302 | 236 | 267 | 659 | 655 | 145 | 158 | 848 | 204 | 449 |
| 3 | 374 | 281 | 302 | 258 | 270 | 651 | 659 | 145 | 158 | 848 | 367 | 445 |
| 4 | 374 | 281 | 267 | 261 | 204 | 638 | 659 | 149 | 158 | 848 | 367 | 438 |
| 5 | 374 | 281 | 258 | 258 | 494 | 634 | 659 | 149 | 158 | 848 | 367 | 438 |
| 6 | 370 | 278 | 278 | 267 | 494 | 630 | 701 | 149 | 158 | 848 | 367 | 430 |
| 7 | 367 | 278 | 281 | 156 | 494 | 638 | 705 | 152 | 158 | 848 | 367 | 405 |
| 8 | 364 | 281 | 281 | 156 | 659 | 688 | 705 | 152 | 158 | 848 | 367 | 384 |
| 9 | 357 | 281 | 281 | 230 | 659 | 709 | 705 | 152 | 158 | 848 | 367 | 384 |
| 10 | 350 | 281 | 287 | 287 | 659 | 709 | 705 | 152 | 161 | 848 | 367 | 377 |
| 11 | 350 | 281 | 287 | 287 | 659 | 709 | 705 | 152 | 161 | 848 | 367 | 377 |
| 12 | 350 | 281 | 287 | 311 | 663 | 705 | 705 | 152 | 165 | 848 | 402 | 377 |
| 13 | 350 | 275 | 287 | 335 | 663 | 705 | 709 | 152 | 170 | 852 | 402 | 370 |
| 14 | 344 | 275 | 258 | 360 | 663 | 701 | 709 | 152 | 172 | 852 | 402 | 364 |
| 15 | 344 | 275 | 255 | 384 | 663 | 676 | 709 | 154 | 172 | 859 | 391 | 360 |
| 16 | 344 | 275 | 255 | 384 | 667 | 676 | 709 | 154 | 255 | 859 | 384 | 360 |
| 17 | 340 | 275 | 255 | 384 | 667 | 672 | 705 | 154 | 475 | 859 | 384 | 357 |
| 18 | 340 | 272 | 255 | 388 | 667 | 672 | 705 | 154 | 634 | 859 | 438 | 357 |
| 19 | 334 | 272 | 236 | 388 | 667 | 672 | 642 | 154 | 735 | 859 | 464 | 350 |
| 20 | 328 | 258 | 236 | 391 | 676 | 672 | 583 | 154 | 743 | 861 | 475 | 350 |
| 21 | 318 | 258 | 236 | 402 | 676 | 672 | 583 | 154 | 743 | 861 | 475 | 350 |
| 22 | 318 | 258 | 236 | 402 | 676 | 672 | 583 | 156 | 743 | 861 | 475 | 350 |
| 23 | 318 | 302 | 233 | 402 | 676 | 672 | 583 | 156 | 835 | 861 | 467 | 350 |
| 24 | 312 | 302 | 230 | 402 | 676 | 672 | 583 | 156 | 835 | 856 | 464 | 350 |
| 25 | 312 | 302 | 230 | 293 | 676 | 672 | 583 | 156 | 785 | 856 | 464 | 350 |
| 26 | 312 | 302 | 230 | 293 | 676 | 672 | 583 | 156 | 819 | 456 | 456 | 350 |
| 27 | 312 | 302 | 225 | 293 | 676 | 659 | 145 | 156 | 848 | 456 | 456 | 350 |
| 28 | 312 | 302 | 275 | 299 | 676 | 655 | 145 | 156 | 848 | 456 | 456 | 350 |
| 29 | 306 | 290 | 272 | 258 | ...... | 651 | 145 | 156 | 848 | 402 | 456 | 350 |
| 30 | 299 | 281 | 267 | 258 | ...... | 651 | 145 | 158 | 848 | 402 | 449 | 350 |
| 31 | 287 | ...... | 252 | 258 | ...... | 651 | ..... | 158 | ...... | 402 | 449 | ...... |

*Daily discharge, in second-feet, of Truckee River at Tahoe, Cal., for 1909–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 350 | 374 | 347 | 617 | 287 | 230 | 124 | 40 | 19 |
| 2 | 350 | 374 | 347 | 575 | 287 | 230 | 124 | 40 | 19 |
| 3 | 344 | 374 | 347 | 575 | 258 | 230 | 134 | 41 | 19 |
| 4 | 344 | 374 | 347 | 575 | 287 | 230 | 95 | 45 | 19 |
| 5 | 344 | 374 | 347 | 575 | 287 | 258 | 95 | 43 | 19 |
| 6 | 344 | 374 | 347 | 575 | 287 | 258 | 95 | 43 | 19 |
| 7 | 344 | 374 | 347 | 575 | 287 | 258 | 67 | 23 | 19 |
| 8 | 344 | 374 | 344 | 575 | 287 | 258 | 67 | 18 | 19 |
| 9 | 344 | 374 | 344 | 575 | 287 | 258 | 67 | 19 | 19 |
| 10 | 367 | 374 | 340 | 575 | 287 | 258 | 67 | 19 | 19 |
| 11 | 367 | 374 | 340 | 575 | 258 | 258 | 67 | 19 | 19 |
| 12 | 367 | 374 | 340 | 575 | 258 | 258 | 86 | 19 | 19 |
| 13 | 367 | 374 | 340 | 575 | 258 | 258 | 58 | 19 | 23 |
| 14 | 367 | 370 | 337 | 575 | 258 | 258 | 58 | 19 | 24 |
| 15 | 367 | 367 | 331 | 575 | 258 | 258 | 58 | 19 | 26 |
| 16 | 367 | 367 | 328 | 350 | 258 | 258 | 58 | 19 | 26 |
| 17 | 367 | 364 | 331 | 350 | 258 | 258 | 58 | 19 | 26 |
| 18 | 367 | 364 | 334 | 258 | 244 | 258 | 58 | 19 | 26 |
| 19 | 360 | 364 | 318 | 258 | 258 | 230 | 58 | 19 | 26 |
| 20 | 360 | 364 | 318 | 258 | 258 | 230 | 58 | 19 | 26 |
| 21 | 360 | 360 | 334 | 258 | 258 | 230 | 58 | 19 | 24 |
| 22 | 357 | 357 | 318 | 258 | 258 | 217 | 58 | 19 | 23 |
| 23 | 350 | 353 | 312 | 258 | 258 | 217 | 75 | 19 | 23 |
| 24 | 350 | 353 | 441 | 258 | 258 | 217 | 45 | 19 | 23 |
| 25 | 350 | 350 | 596 | 258 | 244 | 217 | 45 | 19 | 23 |
| 26 | 374 | 350 | 596 | 258 | 244 | 217 | 35 | 19 | 23 |
| 27 | 374 | 350 | 596 | 272 | 244 | 192 | 35 | 19 | 23 |
| 28 | 374 | 350 | 596 | 272 | 230 | 192 | 35 | 19 | 23 |
| 29 | 374 | 347 | 617 | 287 | 179 | 152 | 35 | 19 | 23 |
| 30 | 374 | 347 | 617 | 287 | ........ | 124 | 37 | 19 | 23 |
| 31 | 374 | ........ | 617 | 287 | ........ | 124 | ........ | 19 | ........ |

NOTE.—Daily discharge determined from a well-defined rating curve. Discharge Jan. 1–14, 1909, estimated.

*Monthly discharge of Truckee River at Tahoe, Cal., for 1895–96 and 1900–1912.*

[Drainage area, 519 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1895.** | | | | | | | |
| July | 1,185 | 442 | 914 | 1.76 | 1.90 | 56,200 | |
| August | 441 | 393 | 425 | .82 | .94 | 26,111 | |
| September | 392 | 357 | 374 | .72 | .80 | 22,244 | |
| **1895–96.** | | | | | | | |
| October | 496 | 344 | 415 | .80 | .92 | 25,538 | |
| November | 471 | 408 | 437 | .84 | .94 | 26,002 | |
| December | 253 | 246 | 250 | .48 | .56 | 15,388 | |
| January | 293 | 244 | 262 | .50 | .58 | 16,102 | |
| February | 292 | 288 | 290 | .56 | .60 | 16,677 | |
| **1900.** | | | | | | | |
| March | ........ | ........ | 0 | 0 | 0 | 0 | |
| April | ........ | ........ | 0 | 0 | 0 | 0 | |
| May | ........ | ........ | 0 | 0 | 0 | 0 | |
| June | 236 | 0 | 52 | .10 | .11 | 3,106 | |
| July | 260 | 0 | 214 | .41 | .47 | 13,131 | |
| August | 260 | 211 | 232 | .45 | .53 | 14,261 | |
| September | 224 | 177 | 196 | .38 | .43 | 11,667 | |

*Monthly discharge of Truckee River at Tahoe, Cal., for 1895–96, and 1900–1912*—Contd.

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Per square mile. | Run-off. Depth in inches on drainage area. | Total in acre-feet. | Accuracy. |
|---|---|---|---|---|---|---|---|
| **1905–6.** | | | | | | | |
| October | 422 | 334 | 390 | 0.751 | [illegible] | [illegible] | |
| November | 334 | 279 | 305 | [illegible] | [illegible] | [illegible] | |
| December | 306 | 229 | 271 | .522 | [illegible] | [illegible] | |
| January | 392 | 229 | 304 | [illegible] | [illegible] | [illegible] | |
| February | 422 | 376 | 396 | [illegible] | [illegible] | [illegible] | |
| March | 469 | 422 | 443 | [illegible] | [illegible] | [illegible] | |
| April | 502 | 469 | [illegible] | .940 | [illegible] | [illegible] | |
| May | 640 | 392 | 543 | [illegible] | [illegible] | [illegible] | |
| June | 697 | 535 | 594 | 1.14 | [illegible] | [illegible] | |
| July | 736 | 697 | 725 | [illegible] | [illegible] | [illegible] | |
| August | 838 | 552 | 753 | [illegible] | [illegible] | [illegible] | |
| September | 817 | 697 | 759 | [illegible] | [illegible] | [illegible] | |
| The year | 838 | 229 | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1906–7.** | | | | | | | |
| October | 817 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| November | 716 | 622 | [illegible] | [illegible] | [illegible] | [illegible] | |
| December | 697 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| January | 697 | 697 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February | 736 | 697 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | 817 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| April | 659 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| May | 891 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| June | 1,220 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| July | 1,340 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| August | 1,220 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| September | 1,220 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| The year | 1,340 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1907–8.** | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1908–9.** | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1909–10.** | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |

*Monthly discharge of Truckee River at [illegible] for 1909–10 and 1910–11—Contd.*

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Minimum. | Maximum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| [illegible] | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The period | | | | | | [illegible] | |

[illegible] for winter periods may be somewhat in error on account of ice.

*Monthly discharge of Truckee River at [illegible] for 1890.*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). |
|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | August | [illegible] | 45,300 |
| [illegible] | [illegible] | [illegible] | September | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | October | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | | |
| [illegible] | [illegible] | [illegible] | The period | | [illegible] |

## TRUCKEE RIVER NEAR NEVADA-CALIFORNIA STATE LINE.

This station, which is located at Calvada, 1 mile upstream from the California state line, 17 miles west of Reno, Nev., was established September 7, 1899, at Farad, 2½ miles farther upstream, and was moved to its present site June 14, 1909.

The station is below all tributaries which head in the Sierra Nevada and is above all diversions.

The station is equipped with an inclined staff gage and a cable and car 50 feet upstream from the gage.

Flood measurements are made with difficulty owing to the high velocities of the current.

The flow is but little affected by ice. The channel shifts somewhat at each high-water period so that additional measurements must be made to define the low-water curve.

Records are fairly reliable.

Discharge measurements made by the Stone & Webster Engineering Corporation in 1910–1912 have been furnished to the United States Geological Survey for publication.

This station has been maintained in cooperation with the United States Reclamation Service.

*Discharge measurements of Truckee River near Nevada-California State line in 1899–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1899. | | Feet. | Sec.-ft. |
| Sept. 7 | L. H. Taylor | 2.0 | [illegible] |
| 1900. | | | |
| Apr. 10 | L. H. Taylor | 2.9 | [illegible] |
| May 15 | do | 4.1 | 1,[illegible] |
| 22 | do | 4.3 | 1,[illegible] |
| June 1 | do | 3.7 | 1,112 |
| 15 | do | 3.2 | 901 |
| July 1 | do | 2.5 | 534 |
| 14 | do | 2.5 | 551 |
| Sept. 6 | do | 2.3 | [illegible] |
| Oct. 2 | do | 1.9 | [illegible] |
| 1901. | | | |
| Feb. 13 | C. V. Taylor | 1.5 | [illegible] |
| 27 | do | 4.5 | 2,[illegible] |
| Mar. 11 | do | 3.4 | 1,[illegible] |
| June 9 | do | 3.9 | 1,[illegible] |
| July 13 | do | 2.6 | [illegible] |
| Aug. 16 | do | 2.1 | [illegible] |
| Sept. 3 | do | 2.2 | [illegible] |
| 14 | do | 2.0 | [illegible] |
| Nov. 9 | do | 1.95 | [illegible] |
| Dec. 14 | do | 1.75 | [illegible] |
| 1902. | | | |
| Apr. 10 | C. V. Taylor | 3.6 | 1,[illegible] |
| May 10 | do | 4.5 | 2,354 |
| 1903. | | | |
| May 1 | H. B. Jameson | 3.95 | 1,[illegible] |
| 26 | do | [illegible] | [illegible] |
| June 25 | do | 2.90 | 1,[illegible] |
| July 18 | do | 2.10 | [illegible] |
| Aug. 27 | do | 2.16 | [illegible] |
| 1904. | | | |
| Apr. 6 | W. A. Wolf | [illegible] | [illegible] |
| 23 | do | [illegible] | [illegible] |
| May 11 | do | [illegible] | [illegible] |
| 31 | do | [illegible] | [illegible] |
| June 14 | do | [illegible] | [illegible] |
| 18 | do | [illegible] | [illegible] |
| July 1 | O. F. Heiser | [illegible] | [illegible] |
| 14 | do | [illegible] | 1,[illegible] |
| Aug. 4 | do | [illegible] | [illegible] |
| 18 | do | [illegible] | [illegible] |
| 31 | W. A. Wolf | 2.71 | [illegible] |
| Nov. 19 | do | [illegible] | [illegible] |
| 1905. | | | |
| Apr. 17 | W. A. Wolf | [illegible] | [illegible] |
| May 13 | do | [illegible] | [illegible] |
| 26 | do | [illegible] | [illegible] |
| June 6 | do | [illegible] | [illegible] |
| 21 | do | [illegible] | [illegible] |
| July 10 | do | [illegible] | [illegible] |
| 18 | do | [illegible] | [illegible] |
| 25 | do | [illegible] | [illegible] |
| Sept. 13 | do | [illegible] | [illegible] |
| 1906. | | | |
| Jan. 24 | C. L. Smith | [illegible] | [illegible] |
| May 23 | M. B. Kennedy | [illegible] | 2,[illegible] |
| June 21 | do | [illegible] | [illegible] |

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1906. | | Feet. | Sec.-ft. |
| July 3 | M. B. Kennedy | [illegible] | [illegible] |
| 30 | do | [illegible] | [illegible] |
| 1907. | | | |
| May 25 | E. A. Porter | [illegible] | [illegible] |
| June 1 | do | [illegible] | [illegible] |
| July 16 | do | [illegible] | [illegible] |
| Aug. 11 | do | [illegible] | [illegible] |
| Sept. [illegible] | do | [illegible] | [illegible] |
| 1908. | | | |
| Mar. [illegible] | E. A. Porter | [illegible] | [illegible] |
| Apr. 3 | do | [illegible] | [illegible] |
| 24 | La Rue and Porter | [illegible] | [illegible] |
| June [illegible] | E. A. Porter | [illegible] | [illegible] |
| July [illegible] | M. B. Kennedy | [illegible] | [illegible] |
| [illegible] | E. A. Porter | [illegible] | [illegible] |
| Oct. [illegible] | do | [illegible] | [illegible] |
| 1909. | | | |
| May 24 | L. J. Towne | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| June [illegible] | do | [illegible] | [illegible] |
| July [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Sept. [illegible] | F. C. [illegible] | [illegible] | [illegible] |
| Oct. [illegible] | do | [illegible] | [illegible] |
| Dec. 4 | do | [illegible] | [illegible] |
| 1910. | | | |
| Mar. [illegible] | F. C. [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | Stone & Webster Eng. Corp. | [illegible] | [illegible] |
| May [illegible] | do | [illegible] | [illegible] |
| July [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Aug. [illegible] | do | [illegible] | [illegible] |
| [illegible] | F. C. [illegible] | [illegible] | [illegible] |
| Oct. [illegible] | [illegible] | [illegible] | [illegible] |
| Nov. [illegible] | Stone & Webster Eng. Corp. | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Dec. [illegible] | [illegible] | [illegible] | [illegible] |
| 1911. | | | |
| Feb. [illegible] | [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | Stone & Webster Eng. Corp. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| May [illegible] | Stone & Webster Eng. Corp. | [illegible] | [illegible] |
| June [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| July [illegible] | Stone & Webster Eng. Corp. | [illegible] | [illegible] |
| Aug. [illegible] | do | [illegible] | [illegible] |
| Oct. [illegible] | [illegible] | [illegible] | [illegible] |
| 1912. | | | |
| Mar. [illegible] | Stone & Webster Eng. Corp. | [illegible] | [illegible] |
| June [illegible] | [illegible] | [illegible] | [illegible] |

NOTE.—After May 24, 1909, gage heights refer to new gage at [illegible].

*[illegible] gage height, in feet, of Truckee River near Nevada-California State line, for [illegible]–1912.*

| Day | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | 4.0 | 3.7 | 2.5 | 2.1 | 2.4 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.2 | 4.0 | 3.7 | 2.5 | 2.1 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.6 | 2.5 | 2.1 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.0 | 3.6 | 2.4 | 2.1 | 2.4 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.0 | 3.2 | 4.3 | 3.5 | 2.4 | 2.1 | 2.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.9 | 3.2 | 4.0 | 3.7 | 2.4 | 2.1 | 2.3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.1 | 3.7 | 2.4 | 2.1 | 2.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.3 | 4.0 | 2.4 | 2.1 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | 4.0 | 2.4 | 2.1 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.5 | 3.7 | 2.4 | 2.1 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 4.6 | 3.7 | 2.4 | 2.1 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.6 | 2.4 | 2.1 | 2.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.4 | 2.1 | 2.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.7 | 2.4 | 2.1 | 2.3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.9 | 4.3 | 3.2 | 2.4 | 2.1 | 2.3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | 3.2 | 2.4 | 2.1 | 2.3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | [illegible] | 2.3 | 2.1 | 2.3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.5 | 3.2 | 2.2 | 2.1 | 2.3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.5 | 3.1 | 2.2 | 2.2 | 2.3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.0 | 2.3 | 2.2 | 2.3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | 3.0 | 2.3 | 2.2 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.5 | 2.9 | 2.3 | 2.4 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | [illegible] | 2.3 | 2.4 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.3 | 2.4 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.0 | 2.7 | 2.3 | 2.4 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.0 | 2.7 | 2.2 | 2.0 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.8 | 2.6 | 2.2 | 2.2 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.8 | 2.5 | 2.2 | 2.2 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.5 | 2.2 | 2.4 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.0 | 3.7 | 2.6 | 2.2 | 2.4 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | 3.7 | ...... | 2.2 | 2.4 | ...... |

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | 2.7 | 4.0 | 4.3 | 3.2 | 2.0 | 2.0 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 3.7 | 4.5 | 3.2 | 2.1 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.6 | 3.1 | 1.9 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.7 | 4.5 | 2.8 | 1.8 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.9 | 3.3 | 4.3 | 2.5 | 1.7 | 2.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.3 | 4.2 | 2.5 | 2.0 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.7 | 4.3 | 2.5 | 2.1 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.7 | 4.3 | 2.4 | 2.1 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.0 | 2.4 | 1.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.7 | 2.5 | 2.0 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | [illegible] | 4.7 | 3.5 | 2.4 | 1.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | 2.4 | 1.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.3 | 2.5 | 1.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 2.4 | 1.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.3 | 2.4 | 1.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | 2.3 | 1.8 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.3 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.3 | 4.0 | 3.6 | 2.3 | 2.1 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.3 | [illegible] | 3.6 | 2.1 | 2.1 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.3 | 3.9 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.3 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.3 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.0 | [illegible] | 3.1 | 2.3 | 2.1 | 2.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | 3.8 | 3.0 | 2.3 | 2.0 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.9 | [illegible] | 2.1 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.9 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 2.3 | 2.0 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | 4.1 | 4.0 | [illegible] | 2.1 | 2.0 | 2.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | ....... | 4.1 | ..... | 1.9 | 2.1 | ..... |

*Daily gage height, in feet, of Truckee River near Nevada-California State line, for 1899–1912—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1901-2.** | | | | | | | | | | | | |
| 1 | 2.0 | 2.2 | 2.3 | 1.5 | 1.4 | 2.1 | 2.2 | 3.4 | 3.7 | 2.4 | 2.1 | 2.2 |
| 2 | 2.0 | 2.1 | 2.3 | 1.9 | 1.6 | 2.1 | 2.1 | 3.3 | 3.7 | 2.2 | 2.1 | 2.2 |
| 3 | 2.1 | 1.8 | 3.0 | 1.8 | 1.6 | 1.9 | 2.2 | 3.2 | 3.5 | 2.2 | 2.1 | 2.2 |
| 4 | 2.1 | 1.9 | 5.2 | 1.6 | 1.6 | 2.0 | 2.2 | 3.2 | 3.5 | 3.0 | 2.1 | 2.2 |
| 5 | 2.1 | 2.0 | 2.6 | 1.5 | 1.7 | 2.1 | 2.5 | 3.3 | 3.4 | 2.1 | 2.0 | 2.2 |
| 6 | 2.0 | 2.1 | 2.7 | 1.6 | 1.6 | 2.4 | 3.2 | 3.9 | 3.5 | 2.1 | 2.0 | 2.1 |
| 7 | 2.0 | 2.0 | 2.3 | 1.5 | 1.7 | 1.9 | 3.0 | 4.4 | 3.9 | 2.1 | 2.0 | 2.2 |
| 8 | 2.0 | 2.0 | 2.1 | 1.5 | 1.8 | 1.9 | 4.0 | 4.6 | 3.9 | 2.1 | 2.0 | 2.1 |
| 9 | 2.1 | 2.0 | 2.1 | 1.6 | 1.5 | 1.6 | 4.1 | 4.6 | 4.0 | 1.7 | 2.0 | 2.0 |
| 10 | 2.2 | 1.9 | 2.0 | 1.5 | 2.1 | 1.5 | 3.7 | 4.7 | 4.1 | 2.0 | 1.8 | 2.0 |
| 11 | 2.2 | 2.0 | 1.7 | 1.4 | 2.1 | 1.6 | 3.4 | 4.8 | 4.0 | 2.1 | 2.1 | 2.0 |
| 12 | 2.0 | 2.0 | 1.5 | 1.5 | 1.8 | 1.6 | 3.5 | 4.7 | 3.9 | 2.0 | 2.1 | 2.0 |
| 13 | 1.3 | 2.1 | 1.4 | 1.6 | 1.5 | 2.0 | 3.6 | 4.5 | 3.9 | 1.9 | 2.0 | 2.2 |
| 14 | 2.0 | 2.0 | 1.8 | 1.7 | 1.8 | 1.7 | 4.1 | 4.0 | 3.9 | 1.9 | 2.1 | 2.1 |
| 15 | 2.0 | 2.0 | 1.6 | 1.5 | 2.4 | 1.6 | 4.3 | 4.0 | 3.5 | 2.0 | 2.2 | 2.0 |
| 16 | 2.0 | 2.0 | 1.5 | 1.6 | 2.5 | 1.5 | 4.2 | 4.0 | 3.3 | 2.0 | 2.2 | 1.9 |
| 17 | 1.9 | 1.9 | 1.5 | 1.6 | 3.2 | 1.6 | 4.5 | 4.1 | 3.3 | 1.9 | 2.1 | 1.9 |
| 18 | 1.9 | 2.0 | 1.5 | 1.8 | 2.5 | 1.7 | 3.6 | 4.0 | 3.2 | 1.9 | 2.1 | 2.0 |
| 19 | 2.0 | 2.0 | 1.6 | 1.5 | 2.3 | 1.6 | 3.4 | 3.6 | 3.2 | 1.9 | 2.1 | 2.0 |
| 20 | 1.5 | 2.0 | 1.5 | 1.5 | 2.3 | 1.8 | 3.6 | 3.5 | 3.2 | 1.9 | 2.1 | 1.9 |
| 21 | 1.9 | 2.0 | 1.4 | 1.5 | 2.2 | 1.9 | 4.3 | 3.4 | 3.2 | 1.8 | 2.1 | 2.0 |
| 22 | 1.9 | 1.9 | 1.7 | 1.5 | 2.0 | 1.7 | 3.6 | 3.2 | 3.2 | 1.9 | 2.0 | 2.0 |
| 23 | 1.9 | 1.9 | 1.8 | 1.5 | 2.0 | 1.7 | 3.6 | 3.4 | 3.0 | 1.8 | 2.1 | 2.0 |
| 24 | 1.9 | 1.9 | 1.8 | 1.7 | 2.9 | 1.5 | 3.4 | 3.3 | 3.1 | 2.1 | 2.1 | 2.0 |
| 25 | 2.0 | 2.0 | 1.6 | 1.6 | 2.4 | 1.7 | 3.4 | 4.6 | 3.1 | 2.2 | 2.1 | 1.9 |
| 26 | 2.0 | 2.1 | 1.3 | 1.4 | 2.0 | 1.7 | 3.3 | 4.2 | 2.6 | 2.2 | 2.1 | 1.9 |
| 27 | 2.2 | 2.0 | 1.5 | 1.7 | 2.0 | 1.7 | 3.2 | 4.4 | 2.6 | 2.2 | 2.2 | 1.9 |
| 28 | 2.2 | 2.0 | 1.5 | 1.8 | 2.0 | 2.0 | 3.2 | 4.3 | 2.6 | 2.2 | 2.2 | 2.0 |
| 29 | 2.2 | 2.2 | 1.5 | 1.8 | ....... | 2.0 | 3.4 | 4.7 | 2.5 | 1.9 | 2.2 | 2.0 |
| 30 | 2.2 | 2.3 | 1.7 | 1.7 | ....... | 2.6 | 3.5 | 4.4 | 2.5 | 2.1 | 2.2 | 2.0 |
| 31 | 2.2 | ....... | 1.5 | 1.7 | ....... | 2.1 | ....... | 4.2 | ....... | 2.2 | 2.2 | ....... |
| **1902-3.** | | | | | | | | | | | | |
| 1 | 1.9 | 1.9 | 1.9 | 2.10 | 1.57 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 2.0 | 1.8 | 2.0 | 2.00 | 2.25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 1.9 | 1.9 | 2.0 | 1.95 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 1.9 | 1.8 | 2.1 | 2.05 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 1.9 | 1.9 | 2.1 | 2.25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | 1.8 | 1.9 | 2.1 | 2.25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | 1.9 | 1.8 | 2.2 | 2.15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | 2.1 | 1.9 | 2.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 1.9 | 1.9 | 2.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | 1.9 | 2.2 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | 2.0 | 2.5 | 2.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | 2.0 | 1.9 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 2.0 | 1.9 | 2.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 2.0 | 1.9 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 1.9 | 2.1 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 1.9 | 1.9 | 2.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | 1.9 | 2.1 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | 1.9 | 1.9 | 1.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | 1.9 | 1.8 | 1.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | 1.9 | 1.9 | 2.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 1.9 | 2.1 | 2.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | 1.9 | 1.7 | 2.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | 1.9 | 1.7 | 2.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | 2.2 | 1.5 | 2.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 2.2 | 1.7 | 2.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | 2.2 | 1.7 | 1.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | 2.1 | 1.6 | 1.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 2.1 | 1.6 | 1.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 2.0 | 1.8 | 1.9 | [illegible] | ....... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 1.9 | 1.8 | 2.1 | [illegible] | ....... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | 1.9 | ....... | 2.1 | [illegible] | ....... | [illegible] | ....... | [illegible] | ....... | [illegible] | [illegible] | ....... |

*Daily gage height, in feet, of Truckee River near Nevada-California State line, for 1899–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903-4. | | | | | | | | | | | | |
| 1 | 1.95 | 2.20 | 2.00 | 2.05 | 1.90 | 3.15 | 4.22 | 4.15 | 4.85 | 3.95 | 3.00 | 2.65 |
| 2 | 2.00 | 2.10 | 1.95 | 2.00 | 2.00 | 3.25 | 4.10 | 4.15 | 5.30 | 3.80 | ...... | 2.65 |
| 3 | 2.10 | 1.90 | 2.00 | 2.00 | 1.95 | 4.25 | 4.15 | 4.15 | 5.35 | 3.70 | 3.00 | 2.65 |
| 4 | 2.12 | 2.15 | ...... | 2.50 | 1.90 | 4.20 | 4.15 | 4.40 | 5.22 | 3.80 | 2.95 | ...... |
| 5 | 2.10 | 2.30 | 1.50 | 2.30 | 1.85 | 4.00 | 4.20 | 4.68 | ...... | 3.80 | 3.15 | 2.95 |
| 6 | 1.95 | 2.20 | 1.50 | 2.30 | 1.90 | 3.88 | 4.60 | 4.95 | 5.25 | 3.72 | 3.00 | 2.65 |
| 7 | 2.00 | 2.00 | 1.60 | 2.15 | 2.00 | 4.77 | 4.40 | 5.35 | 5.00 | 3.58 | 2.85 | 2.70 |
| 8 | 1.95 | 2.00 | 1.90 | 2.12 | 2.00 | 5.00 | ...... | 5.35 | 4.85 | 3.60 | 2.92 | 2.70 |
| 9 | 1.95 | 1.90 | 2.02 | 2.15 | 2.00 | 4.30 | 4.65 | 5.35 | 4.85 | 3.55 | ...... | 2.72 |
| 10 | 2.05 | 1.95 | 1.90 | 2.15 | 2.00 | 4.20 | 5.05 | 5.68 | 4.85 | 3.50 | 2.90 | 2.70 |
| 11 | 2.15 | 2.20 | 1.90 | 1.95 | 1.90 | 4.00 | 5.45 | 5.75 | 4.82 | 3.45 | 2.90 | 2.72 |
| 12 | 2.05 | 3.10 | 1.90 | 1.92 | 2.05 | 3.85 | 5.75 | 5.95 | 4.78 | 3.40 | 2.90 | 2.70 |
| 13 | 2.05 | 4.10 | 2.05 | 1.90 | 1.90 | 3.85 | 6.20 | 6.12 | 4.75 | 3.20 | 2.85 | ...... |
| 14 | 2.10 | 4.05 | 1.90 | 2.00 | 2.05 | 3.55 | 6.48 | 6.50 | 4.75 | 3.40 | ...... | 2.80 |
| 15 | 2.12 | 3.65 | 1.90 | 2.05 | 2.05 | 3.50 | 6.25 | 6.08 | 4.75 | 3.38 | 2.90 | 2.70 |
| 16 | 2.15 | 2.40 | 2.00 | 2.10 | 3.80 | 3.65 | 5.70 | 6.02 | 4.72 | 3.30 | 2.90 | 2.70 |
| 17 | 2.05 | 2.00 | 1.95 | 2.05 | 3.60 | 3.90 | 5.42 | 6.02 | 4.65 | 3.35 | 2.85 | 2.75 |
| 18 | 2.20 | 1.95 | 2.02 | 2.00 | 2.85 | 5.15 | 5.42 | 5.72 | 4.60 | 3.35 | 2.90 | 2.75 |
| 19 | 2.30 | 2.10 | 1.95 | 1.95 | 2.80 | 6,20 | 5.45 | 5.30 | 4.40 | 3.25 | 2.90 | 2.80 |
| 20 | 2.17 | 2.95 | 1.95 | 1.80 | 2.60 | 6.50 | 4.85 | 5.28 | 4.30 | 3.30 | 2.90 | 2.80 |
| 21 | 2.10 | 4.80 | 2.00 | 2.00 | 2.50 | 4.92 | 4.58 | 5.40 | 4.30 | 3.30 | 3.15 | 2.75 |
| 22 | 2.00 | 3.80 | 1.80 | 2.00 | 4.95 | 4.90 | 4.40 | 6.10 | 4.47 | 3.30 | 2.85 | 2.75 |
| 23 | 2.18 | 3.30 | 1.80 | 1.90 | 6.30 | 4.50 | 4.22 | 6.15 | 4.35 | 3.25 | 2.75 | 2.75 |
| 24 | 2.25 | 3.15 | 1.75 | 1.95 | 8.00 | 4.05 | 4.15 | 6.20 | 4.35 | 3.25 | 2.75 | 2.70 |
| 25 | 2.22 | 2.55 | 1.80 | 1.90 | 5.50 | 3.90 | 4.15 | 6.42 | 4.15 | 3.25 | 2.75 | 2.85 |
| 26 | 2.18 | 2.30 | 1.70 | 2.00 | 5.00 | 3.90 | 3.95 | 5.95 | ...... | 3.25 | 2.75 | ...... |
| 27 | 2.10 | 2.30 | 1.70 | 1.80 | 4.00 | 3.85 | 4.10 | 5.12 | 4.08 | ...... | 2.70 | 2.65 |
| 28 | 2.00 | 2.30 | 1.60 | 1.85 | 3.50 | 5.10 | 4.02 | 5.28 | 4.10 | 3.15 | 2.70 | ...... |
| 29 | 2.05 | 2.10 | 1.60 | 1.60 | 3.15 | 5.35 | 4.05 | 5.30 | 4.10 | 3.15 | 2.70 | 2.75 |
| 30 | 2.15 | 2.00 | 1.70 | 1.75 | ...... | 5.12 | 4.02 | 5.40 | 4.05 | 3.00 | 2.70 | 2.75 |
| 31 | 2.10 | ...... | 1.95 | 1.90 | | 4.28 | ...... | 5.25 | ...... | 2.95 | 2.65 | ...... |
| 1904-5. | | | | | | | | | | | | |
| 1 | 2.95 | 2.85 | 2.75 | ...... | 2.30 | 3.30 | 2.40 | 3.45 | 3.30 | 2.30 | 2.00 | 2.05 |
| 2 | 2.80 | 2.95 | 2.75 | 2.80 | 2.30 | 3.30 | ...... | 3.35 | 3.25 | 2.35 | 2.07 | 2.10 |
| 3 | 2.75 | 2.85 | 2.74 | 2.80 | 2.30 | 3.30 | 2.60 | 3.25 | 3.25 | 2.35 | 2.10 | 2.05 |
| 4 | 2.75 | 2.80 | ...... | 2.80 | 2.30 | 3.30 | 2.60 | 3.20 | 3.08 | 2.32 | 2.07 | 2.10 |
| 5 | 2.78 | 2.80 | 2.75 | 2.70 | 2.28 | 3.30 | 2.70 | 3.15 | 3.05 | 2.35 | 2.50 | 2.10 |
| 6 | 2.80 | 2.80 | 2.75 | 2.70 | 2.30 | 3.30 | 2.85 | 3.08 | 3.25 | 2.32 | 2.15 | 2.05 |
| 7 | 2.52 | 2.80 | 2.70 | 2.70 | 2.30 | 3.30 | 2.90 | 3.30 | 3.05 | 2.30 | 2.10 | 2.10 |
| 8 | 2.55 | 2.78 | 2.60 | ...... | 2.30 | 3.30 | 2.88 | 3.05 | 3.05 | 2.30 | 2.10 | 2.10 |
| 9 | 2.60 | 2.80 | 2.65 | 2.65 | 2.30 | 3.30 | ...... | 3.00 | 3.05 | 2.25 | 2.10 | 2.10 |
| 10 | ...... | ...... | 2.65 | 2.70 | 2.35 | 3.20 | 3.25 | 2.95 | 3.35 | 2.20 | 2.10 | 2.10 |
| 11 | 3.75 | 2.85 | 2.60 | 2.60 | 2.30 | 3.20 | 2.85 | 2.95 | 3.30 | 2.20 | 2.10 | 2.05 |
| 12 | 3.40 | 2.68 | 2.60 | 2.60 | 2.35 | 3.20 | 2.80 | 2.90 | 3.30 | 2.10 | 2.18 | 2.05 |
| 13 | 3.10 | 2.65 | 2.60 | 2.60 | 2.25 | 3.20 | 2.80 | 2.90 | 3.25 | 2.10 | 2.15 | 2.05 |
| 14 | 2.95 | 2.60 | 2.60 | 2.20 | 2.25 | 3.25 | 2.80 | 2.98 | 3.17 | 2.25 | 2.10 | 2.05 |
| 15 | 3.05 | 2.60 | 2.60 | 2.40 | 2.30 | 3.25 | 2.85 | 3.45 | 3.20 | 2.25 | 2.10 | 2.02 |
| 16 | 3.10 | 2.65 | 2.60 | 2.40 | 2.35 | 2.70 | 2.85 | 3.65 | ...... | 2.25 | 2.12 | 2.00 |
| 17 | 3.10 | 2.65 | 2.50 | 2.20 | 2.40 | 2.70 | 2.85 | 3.95 | 3.22 | 2.18 | 2.10 | 2.05 |
| 18 | 3.00 | ...... | 2.50 | 2.20 | 2.47 | 2.75 | 2.85 | 3.70 | 3.08 | 2.15 | 2.15 | 2.05 |
| 19 | ...... | 2.70 | 2.50 | 2.20 | 2.40 | 2.75 | 2.82 | 3.75 | 3.05 | 2.15 | 2.10 | 2.15 |
| 20 | 2.85 | ...... | 2.60 | 2.20 | 2.65 | 2.78 | ...... | 3.75 | 3.00 | 2.02 | 2.10 | 2.10 |
| 21 | 2.90 | 2.70 | 2.60 | 2.60 | 2.45 | 2.80 | 2.65 | 3.70 | 2.80 | 2.15 | 2.15 | 2.05 |
| 22 | 2.90 | 2.70 | 2.55 | 2.70 | 2.85 | 2.80 | 2.65 | 3.70 | 2.80 | 2.15 | 2.15 | 2.06 |
| 23 | 2.62 | 2.65 | 2.55 | 2.50 | 2.62 | 2.60 | 2.70 | 3.65 | 2.75 | 2.15 | 2.12 | 2.06 |
| 24 | 2.60 | 2.62 | 2.55 | 2.50 | 3.02 | 2.45 | 2.90 | 3.65 | 2.60 | 2.15 | 2.10 | 2.06 |
| 25 | 2.55 | 2.60 | 2.55 | 2.32 | 3.02 | 2.40 | 3.10 | 3.50 | 2.60 | 2.10 | 2.10 | 2.05 |
| 26 | 2.55 | 2.60 | 2.55 | 2.32 | 3.08 | 2.95 | 4.02 | 3.40 | 2.50 | 2.10 | 2.02 | 2.05 |
| 27 | 2.55 | 2.70 | 2.55 | 2.30 | 3.12 | 2.95 | 3.80 | 3.30 | 2.45 | 2.10 | 2.05 | 2.06 |
| 28 | 2.90 | 2.75 | 2.55 | 2.50 | 3.05 | 2.50 | 3.80 | 3.35 | 2.40 | 2.10 | 2.10 | 2.05 |
| 29 | 2.90 | 2.70 | 2.55 | ...... | ...... | 2.30 | 3.72 | 3.38 | 2.38 | 2.10 | 2.05 | 2.05 |
| 30 | 2.90 | 2.65 | 3.30 | 2.40 | ...... | 2.40 | ...... | 3.40 | 2.35 | 2.10 | 2.10 | 2.05 |
| 31 | 2.90 | ...... | 2.85 | 2.30 | ...... | 2.40 | ...... | 3.30 | ...... | 2.00 | 2.02 | ...... |
| 1905-6. | | | | | | | | | | | | |
| 1 | 2.02 | 2.02 | 1.95 | 1.80 | 2.30 | 2.70 | 3.58 | 5.92 | 4.00 | 4.85 | 2.85 | 2.75 |
| 2 | 2.02 | 1.90 | 1.90 | 1.80 | 2.28 | 2.65 | 3.48 | 6.85 | 4.25 | 4.98 | 2.90 | 2.75 |
| 3 | 2.05 | 1.95 | 1.87 | 1.80 | 2.30 | 2.62 | 3.22 | 6.85 | 4.65 | 5.00 | 2.90 | 2.62 |
| 4 | 2.05 | 2.00 | 1.90 | 1.72 | 2.28 | 2.58 | 3.08 | 6.82 | 5.08 | 4.90 | 2.85 | 2.60 |
| 5 | 2.05 | 1.95 | 1.80 | 1.72 | 2.25 | 2.52 | 3.00 | 7.15 | 5.05 | 4.95 | 2.65 | 2.65 |

*Daily gage height, in feet, of Truckee River near Nevada-California State line, for 1899–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1905-6.** | | | | | | | | | | | | |
| 6 | 2.15 | 1.97 | 1.80 | 1.75 | 2.35 | 2.50 | 3.35 | 7.08 | 4.65 | 4.98 | 2.60 | 2.68 |
| 7 | 2.10 | 1.85 | 1.90 | 1.75 | 2.35 | 2.50 | 3.50 | 7.18 | 4.45 | 4.60 | 2.65 | 2.65 |
| 8 | 2.05 | 1.90 | 1.90 | 1.85 | 2.30 | 2.55 | 3.90 | 7.15 | 4.30 | 4.68 | 2.60 | 2.65 |
| 9 | 2.10 | 1.95 | 1.90 | 1.95 | 2.30 | 2.60 | 4.20 | 7.18 | 4.88 | 4.50 | 2.65 | 2.65 |
| 10 | 2.10 | 1.95 | 1.90 | 2.00 | 2.30 | 2.72 | 4.22 | 6.85 | 5.25 | 4.25 | 2.70 | 2.65 |
| 11 | 2.20 | 1.95 | 1.90 | 1.95 | 2.30 | 2.85 | 3.98 | 6.98 | 6.25 | 4.20 | 2.80 | 2.65 |
| 12 | 2.15 | 1.87 | 1.85 | 1.98 | 2.48 | 3.72 | 4.00 | 6.60 | 5.90 | 4.20 | 2.85 | 2.65 |
| 13 | 2.10 | 1.95 | 1.92 | 2.00 | 2.40 | 3.05 | 4.10 | 6.35 | 5.20 | 4.22 | 2.90 | 2.65 |
| 14 | 2.10 | 1.70 | 1.87 | 1.98 | 2.38 | 2.78 | 4.28 | 6.40 | 5.05 | 4.20 | 2.80 | 2.65 |
| 15 | 2.05 | 1.70 | 1.97 | 2.05 | 2.52 | 2.82 | 4.55 | 6.25 | 5.10 | 4.00 | 2.80 | 2.65 |
| 16 | 2.05 | 1.85 | 1.87 | 2.18 | 2.52 | 2.80 | 6.95 | 5.88 | 5.55 | 3.88 | 2.80 | 2.68 |
| 17 | 2.05 | 1.98 | 1.90 | 2.22 | 2.52 | 2.80 | 6.00 | 5.68 | 5.55 | 3.70 | 2.70 | 2.65 |
| 18 | 2.05 | 1.97 | 1.77 | 2.90 | 2.55 | 2.78 | 5.98 | 5.25 | 5.02 | 3.42 | 2.80 | 2.65 |
| 19 | 2.05 | 1.80 | 1.80 | 3.18 | 2.85 | 2.82 | 6.08 | 4.80 | 5.22 | 3.60 | 2.75 | 2.62 |
| 20 | 2.05 | 1.95 | 1.80 | 2.80 | 2.90 | 2.78 | 6.05 | 4.88 | 5.32 | 3.50 | 2.85 | 2.65 |
| 21 | 2.10 | 1.97 | 1.70 | 2.68 | 2.70 | 2.85 | 6.60 | 4.70 | 5.50 | 3.45 | 2.80 | 2.62 |
| 22 | 2.05 | 2.00 | 1.70 | 2.68 | 2.73 | 3.15 | 6.80 | 4.78 | 5.85 | 3.40 | 2.85 | 2.60 |
| 23 | 2.05 | 1.97 | 1.80 | 2.62 | 2.70 | 3.25 | 6.75 | 4.62 | 5.20 | 3.40 | 2.78 | 2.65 |
| 24 | 2.20 | 2.00 | 1.80 | 2.58 | 2.70 | 3.45 | 5.90 | 4.40 | 5.20 | 3.35 | 2.78 | 2.65 |
| 25 | 2.00 | 1.95 | 1.80 | 2.52 | 2.68 | 3.52 | 5.70 | 4.40 | 5.02 | 3.35 | 2.75 | 2.65 |
| 26 | 2.02 | 1.90 | 1.82 | 2.50 | 2.68 | 3.50 | 5.88 | 4.82 | 4.92 | 3.68 | 2.75 | 2.62 |
| 27 | 2.00 | 1.85 | 1.82 | 2.50 | 2.68 | 3.40 | 5.82 | 4.55 | 4.90 | 3.30 | 2.75 | 2.62 |
| 28 | 2.02 | 1.90 | 1.80 | 2.48 | 2.70 | 3.48 | 4.70 | 4.20 | 4.45 | 3.30 | 2.80 | 2.62 |
| 29 | 2.02 | 1.95 | 1.82 | 2.42 | ....... | 3.40 | 4.35 | 4.02 | 4.28 | 3.15 | 2.80 | 2.60 |
| 30 | 2.00 | 1.95 | 1.78 | 2.35 | ....... | 3.45 | 4.80 | 3.92 | 4.20 | 3.05 | 2.80 | 2.60 |
| 31 | 2.50 | ....... | 1.75 | 2.20 | ....... | 3.90 | ....... | 3.80 | ....... | 3.00 | 2.75 | ...... |
| **1906-7.** | | | | | | | | | | | | |
| 1 | 2.35 | 2.75 | 2.50 | 2.65 | 2.9 | 3.1 | 4.2 | 5.6 | 6.15 | 5.25 | 4.05 | 3.4 |
| 2 | 2.38 | 2.65 | 2.48 | 2.65 | 3.7 | 3.1 | 4.3 | 5.7 | 6.15 | 5.1 | 3.95 | 3.4 |
| 3 | 2.50 | 2.65 | 2.48 | 2.7 | 3.8 | 3.1 | 4.3 | 5.7 | 6.05 | 5.25 | 3.95 | 3.4 |
| 4 | 2.50 | 2.98 | 2.52 | 2.7 | 3.95 | 3.1 | 4.2 | 5.55 | 6.05 | 5.4 | 3.85 | 3.45 |
| 5 | 2.48 | 2.78 | 2.50 | 2.7 | 4.05 | 3.15 | 4.2 | 5.15 | 5.9 | 5.05 | 3.85 | 3.4 |
| 6 | 2.48 | 2.70 | 2.45 | 2.7 | 3.8 | 3.15 | 4.0 | 5.1 | 5.75 | 5.0 | 3.8 | 3.4 |
| 7 | 2.50 | 2.68 | 2.45 | 2.6 | 3.7 | 3.1 | 4.1 | 5.2 | 5.55 | 4.95 | 3.8 | 3.4 |
| 8 | 2.50 | 2.65 | 2.48 | 2.65 | 3.4 | 3.1 | 4.2 | 5.15 | 5.25 | 4.8 | 3.75 | 3.4 |
| 9 | 2.50 | 2.68 | 2.45 | 2.65 | 3.35 | 3.1 | 4.3 | 5.3 | 5.25 | 4.8 | 3.7 | 3.4 |
| 10 | 2.58 | 2.68 | 2.68 | 2.7 | 3.3 | 3.1 | 4.9 | 5.6 | 5.25 | 4.75 | 3.65 | 3.4 |
| 11 | 2.75 | 2.70 | 2.60 | 2.7 | 3.25 | 3.0 | 5.2 | 6.0 | 5.45 | 4.75 | 3.6 | 3.4 |
| 12 | 2.65 | 2.65 | 2.62 | 2.65 | 3.25 | 3.1 | 5.5 | 5.7 | 5.5 | 4.75 | 3.6 | 3.4 |
| 13 | 2.72 | 2.70 | 2.65 | 2.7 | 3.25 | 3.05 | 6.15 | 5.15 | 4.95 | 4.55 | 3.55 | 3.4 |
| 14 | 2.75 | 2.68 | 2.65 | 2.7 | 3.25 | 3.0 | 7.0 | 5.0 | 4.8 | 4.5 | 3.5 | 3.35 |
| 15 | 2.68 | 2.70 | 2.65 | 2.7 | 3.25 | 3.05 | 5.9 | 5.2 | 4.65 | 4.5 | 3.6 | 3.3 |
| 16 | 2.65 | 2.70 | 2.60 | 2.7 | 3.25 | 3.1 | 5.5 | 5.45 | 4.5 | 4.45 | 3.6 | 3.3 |
| 17 | 2.65 | 2.65 | 2.58 | 2.65 | 3.2 | 5.35 | 5.65 | 5.65 | 4.45 | 4.4 | 3.55 | 3.3 |
| 18 | 2.65 | 2.65 | 2.60 | 2.65 | 3.2 | 11.5 | 5.8 | 5.9 | 4.55 | 4.4 | 3.5 | 3.3 |
| 19 | 2.65 | 2.60 | 2.60 | 2.6 | 3.2 | 8.1 | 6.0 | 6.3 | 4.7 | 4.4 | 3.5 | 3.3 |
| 20 | 2.62 | 2.55 | 2.60 | 2.65 | 3.15 | 7.3 | 6.0 | 6.15 | 5.0 | 4.4 | 3.5 | 3.3 |
| 21 | 2.65 | 2.60 | 2.60 | 2.6 | 3.2 | 6.25 | 5.8 | 5.75 | 5.0 | 4.25 | 3.5 | 3.3 |
| 22 | 2.52 | 2.60 | 2.60 | 2.65 | 3.3 | 5.85 | 5.85 | 5.55 | 5.2 | 4.15 | 3.5 | 3.3 |
| 23 | 2.52 | 2.58 | 2.60 | 2.65 | 3.25 | 4.75 | 6.15 | 5.2 | 5.15 | 4.2 | 3.45 | 3.3 |
| 24 | 2.60 | 2.50 | 2.62 | 2.6 | 3.25 | 4.3 | 6.3 | 5.2 | 4.9 | 4.15 | 3.4 | 3.3 |
| 25 | 2.60 | 2.50 | 2.68 | 2.6 | 3.25 | 4.25 | 6.2 | 5.2 | 4.75 | 4.1 | 3.4 | 3.3 |
| 26 | 2.62 | 2.55 | 2.98 | 2.6 | 3.2 | 4.2 | 6.15 | 5.2 | 4.8 | 4.1 | 3.4 | 3.3 |
| 27 | 2.70 | 2.50 | 2.92 | 2.7 | 3.2 | 4.05 | 6.1 | 5.3 | 5.0 | 4.2 | 3.65 | 3.3 |
| 28 | 2.45 | 2.45 | 2.85 | 2.9 | 3.2 | 4.0 | 6.0 | 5.45 | 5.25 | 4.2 | 3.4 | 3.25 |
| 29 | 2.42 | 2.52 | 2.80 | 2.85 | ....... | 4.0 | 5.85 | 5.6 | 5.15 | 4.2 | 3.4 | 3.2 |
| 30 | 2.55 | 2.52 | 2.78 | 2.85 | ....... | 4.0 | 5.65 | 5.75 | 5.15 | 4.15 | 3.4 | 3.2 |
| 31 | 2.62 | ....... | 2.75 | 2.85 | ....... | 4.1 | ....... | 6.05 | ....... | 4.1 | 3.4 | ...... |
| **1907-8.** | | | | | | | | | | | | |
| 1 | 3.2 | 3.1 | 2.8 | 2.8 | 2.9 | 2.8 | 2.9 | 3.4 | 2.85 | 2.4 | 2.4 | 2.2 |
| 2 | 3.3 | 3.1 | 2.8 | 2.8 | 2.8 | 2.8 | 2.9 | 3.45 | 2:8 | 2.3 | 2.4 | 2.2 |
| 3 | 3.2 | 3.1 | 2.8 | 2.8 | 3.0 | 2.8 | 2.9 | 3.1 | 2.7 | 2.25 | 2.6 | 2.2 |
| 4 | 2.45 | 3.1 | 2.8 | 2.8 | 2.8 | 2.8 | 3.05 | 2.95 | 2.65 | 2.2 | 2.2 | 2.15 |
| 5 | 3.2 | 3.0 | 2.9 | 2.8 | 2.8 | 2.8 | 3.15 | 2.9 | 2.75 | 2.3 | 2.2 | 2.1 |
| 6 | 2.4 | 3.0 | 3.0 | 2.8 | 2.8 | 2.75 | 3.25 | 3.0 | 2.8 | 2.2 | 2.2 | 2.0 |
| 7 | 2.4 | 2.75 | 3.0 | 2.8 | 2.8 | 2.7 | 3.05 | 3.2 | 2.9 | 2.2 | 2.4 | 2.2 |
| 8 | 2.4 | 2.7 | 2.9 | 2.8 | 2.8 | 2.7 | 2.8 | 2.95 | 3.05 | 2.3 | 2.4 | 2.2 |
| 9 | 3.1 | 2.9 | 2.9 | 2.85 | 2.8 | 2.8 | 2.95 | 2.8 | 3.05 | 2.35 | 2.4 | 2.2 |
| 10 | 3.25 | 3.0 | 2.9 | 2.85 | 2.8 | 2.8 | 3.1 | 2.8 | 3.1 | 2.3 | 2.4 | 2.15 |

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*Daily gage height, in feet, of Truckee River near Nevada-California State line, for 1899–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1907–8.** | | | | | | | | | | | | |
| 11 | 3.0 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 | 3.35 | 2.8 | 3.05 | 2.35 | 2.35 | 2.2 |
| 12 | 3.2 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 | 3.55 | 2.8 | 2.95 | 2.4 | 2.4 | 2.2 |
| 13 | 3.2 | 3.0 | 3.0 | 2.85 | 2.75 | 2.8 | 3.65 | 2.65 | 3.1 | 2.35 | 2.4 | 2.2 |
| 14 | 3.2 | 3.0 | 3.0 | 3.0 | 2.7 | 2.9 | 3.7 | 2.65 | 3.15 | 2.3 | 2.3 | 2.2 |
| 15 | 3.2 | 2.95 | 3.0 | 2.9 | 2.7 | 3.0 | 3.6 | 2.7 | 2.95 | 2.25 | 2.4 | 2.2 |
| 16 | 3.2 | 3.0 | 2.9 | 2.9 | 2.7 | 3.1 | 3.45 | 2.65 | 2.9 | 2.15 | 2.4 | 2.25 |
| 17 | 3.2 | 3.0 | 2.9 | 2.9 | 2.8 | 3.15 | 3.2 | 2.65 | 2.85 | 2.2 | 2.35 | 2.2 |
| 18 | 3.15 | 2.9 | 2.9 | 2.9 | 2.7 | 3.25 | 3.25 | 2.6 | 2.75 | 2.2 | 2.3 | 2.25 |
| 19 | 3.15 | 2.8 | 2.8 | 2.9 | 2.7 | 3.2 | 3.4 | 2.75 | 2.6 | 2.15 | 2.3 | 2.2 |
| 20 | 3.15 | 2.8 | 2.8 | 2.9 | 2.7 | 3.25 | 3.6 | 2.65 | 2.6 | 2.25 | 2.3 | 2.15 |
| 21 | 3.15 | 2.9 | 2.8 | 3.0 | 2.7 | 3.35 | 3.8 | 2.65 | 2.7 | 2.15 | 2.3 | 2.15 |
| 22 | 3.15 | 2.9 | 2.75 | 2.9 | 2.7 | 3.2 | 3.45 | 2.7 | 2.45 | 2.45 | 2.3 | 2.1 |
| 23 | 3.15 | 2.9 | 2.7 | 2.9 | 2.7 | 3.2 | 3.25 | 2.75 | 2.4 | 2.45 | 2.25 | 2.1 |
| 24 | 3.2 | 2.9 | 2.8 | 2.9 | 2.7 | 3.35 | 3.05 | 2.9 | 2.55 | 2.4 | 2.3 | 2.15 |
| 25 | 3.2 | 2.9 | 2.8 | 2.9 | 2.7 | 3.5 | 3.05 | 3.05 | 2.6 | 2.4 | 2.3 | 2.1 |
| 26 | 3.15 | 2.9 | 2.9 | 2.9 | 2.75 | 3.3 | 3.05 | 3.1 | 2.6 | 2.45 | 2.3 | 2.1 |
| 27 | 3.25 | 2.9 | 3.25 | 2.9 | 2.8 | 3.25 | 3.15 | 2.95 | 2.5 | 2.4 | 2.2 | 2.1 |
| 28 | 3.2 | 2.9 | 3.1 | 2.9 | 2.8 | 3.15 | 3.25 | 2.9 | 2.4 | 2.4 | 2.15 | 2.1 |
| 29 | 3.15 | 2.9 | 2.8 | 2.9 | 2.8 | 3.0 | 3.35 | 3.1 | 2.4 | 2.45 | 2.15 | 2.2 |
| 30 | 3.1 | 2.85 | 2.8 | 2.9 | ....... | 3.1 | 3.4 | 3.05 | 2.45 | 2.4 | 2.25 | 2.15 |
| 31 | 3.1 | ....... | 2.75 | 2.9 | ....... | 2.95 | ....... | 3.0 | ....... | 2.65 | ....... | ....... |
| **1908–9.** | | | | | | | | | | | | |
| 1 | 2.15 | 2.05 | 2.05 | 2.05 | 3.05 | 3.05 | ....... | 5.35 | 5.0 | 4.5 | 3.0 | 2.7 |
| 2 | 2.1 | 2.1 | 2.05 | 2.1 | 3.2 | 3.0 | ....... | 5.35 | 5.25 | 4.5 | 3.0 | 2.7 |
| 3 | 2.1 | 2.1 | 2.1 | 2.1 | 3.15 | 3.1 | ....... | 5.4 | 5.25 | 4.4 | 3.0 | 2.7 |
| 4 | 2.2 | 2.0 | 2.1 | 2.35 | 3.15 | 3.2 | 3.85 | 5.55 | 5.25 | 4.3 | 3.0 | 2.8 |
| 5 | 2.05 | 2.0 | 2.1 | 2.8 | 3.1 | 3.1 | 3.8 | 5.9 | 5.25 | 4.2 | 2.9 | 2.7 |
| 6 | 2.05 | 2.0 | 2.1 | 3.0 | 3.1 | 3.1 | 3.7 | 5.85 | 5.0 | 4.1 | 2.9 | 2.7 |
| 7 | 2.1 | 2.05 | 2.05 | 2.55 | 3.0 | 3.1 | 3.8 | 5.9 | 4.8 | 3.8 | 2.8 | 2.6 |
| 8 | 2.2 | 2.1 | 2.1 | 2.25 | 3.0 | 3.05 | 3.9 | 5.7 | 4.8 | 3.7 | 2.8 | 2.6 |
| 9 | 2.2 | 2.1 | 2.0 | 2.1 | 3.0 | 3.0 | 4.0 | 5.6 | 4.65 | 3.5 | 2.7 | 2.6 |
| 10 | 2.2 | 2.1 | 1.9 | 2.05 | 3.1 | 3.0 | 4.3 | 5.7 | 4.6 | 3.3 | 2.6 | 2.5 |
| 11 | 2.15 | 2.1 | 1.95 | 2.2 | 3.2 | 3.0 | 4.2 | 5.35 | 4.6 | 3.3 | 2.6 | 2.5 |
| 12 | 2.15 | 2.05 | 1.95 | 2.4 | 3.2 | 3.05 | 4.3 | 5.1 | 4.65 | 3.3 | 2.5 | 2.5 |
| 13 | 2.2 | 2.0 | 2.05 | 2.9 | 3.2 | 3.0 | 4.6 | 4.75 | 4.75 | 3.1 | 2.5 | 2.4 |
| 14 | 2.2 | 2.0 | 2.1 | 5.5 | 3.15 | 3.1 | 5.0 | 4.55 | 4.7 | 3.1 | 2.5 | 2.4 |
| 15 | 2.5 | 2.05 | 1.95 | 7.45 | 3.2 | 3.2 | 5.25 | 4.85 | 4.75 | 3.0 | 2.5 | 2.4 |
| 16 | 2.45 | 2.0 | 2.0 | 7.9 | 3.15 | 3.2 | 4.9 | 4.4 | 4.65 | 3.0 | 2.5 | 2.4 |
| 17 | 2.3 | 2.05 | 2.0 | 6.15 | 3.2 | 3.4 | 5.55 | 4.3 | 4.65 | 2.9 | 2.6 | 2.4 |
| 18 | 2.25 | 2.0 | 2.0 | 5.65 | 3.35 | 3.5 | 5.8 | 4.25 | 4.6 | 2.8 | 2.7 | 2.5 |
| 19 | 2.2 | 2.0 | 2.0 | 4.75 | 3.3 | 3.4 | 5.75 | 4.3 | 4.45 | 2.7 | 2.7 | 2.5 |
| 20 | 2.15 | 2.1 | 2.0 | 4.65 | 3.3 | 3.4 | 4.85 | 4.45 | 4.3 | 2.7 | 2.7 | 2.5 |
| 21 | 2.15 | 2.15 | 2.0 | 5.15 | 3.2 | 3.35 | 4.9 | 4.55 | 4.4 | 2.7 | 2.7 | 2.5 |
| 22 | 2.1 | 2.2 | 2.0 | 4.1 | 3.1 | 3.3 | 4.75 | 4.15 | 4.65 | 2.7 | 2.7 | 2.4 |
| 23 | 2.1 | 2.2 | 2.0 | 3.7 | 3.15 | 3.25 | 4.9 | 3.95 | 4.8 | 2.8 | 2.7 | 2.4 |
| 24 | 2.05 | 2.1 | 1.95 | 3.6 | 3.2 | 3.2 | 4.95 | 3.85 | 4.65 | 3.1 | 2.8 | 2.5 |
| 25 | 2.1 | 2.1 | 1.95 | 3.55 | 3.05 | 3.2 | 5.1 | 3.85 | 4.75 | 3.1 | 2.8 | 2.5 |
| 26 | 2.05 | 2.05 | 2.0 | 3.5 | 3.0 | 3.15 | 4.75 | 4.15 | 4.65 | 3.1 | 2.8 | 2.5 |
| 27 | 2.05 | 2.05 | 2.0 | 3.5 | 3.0 | 3.15 | 5.45 | 4.3 | 4.65 | 3.1 | 2.8 | 2.5 |
| 28 | 2.15 | 2.05 | 2.05 | 3.4 | 3.05 | 3.15 | 5.55 | 4.5 | 4.6 | 3.0 | 2.8 | 2.5 |
| 29 | 2.05 | 2.05 | 2.0 | 3.3 | ....... | 3.15 | 5.5 | 4.1 | 4.5 | 3.0 | 2.7 | 2.6 |
| 30 | 1.95 | 2.1 | 2.05 | 3.2 | ....... | 3.1 | 5.5 | 4.0 | 4.6 | 3.0 | 2.7 | 2.6 |
| 31 | 2.1 | ....... | 2.1 | 3.1 | ....... | 3.15 | ....... | 4.25 | ....... | 3.0 | 2.7 | ....... |
| **1909–10.** | | | | | | | | | | | | |
| 1 | 2.6 | 2.4 | 3.8 | 2.7 | 3.4 | 3.3 | 3.2 | 4.1 | 3.4 | 2.8 | 2.9 | 2.6 |
| 2 | 2.6 | 2.4 | 4.5 | 3.6 | 3.4 | 3.3 | 3.3 | 4.0 | 3.3 | 2.8 | 2.9 | 2.6 |
| 3 | 2.6 | 2.4 | 3.8 | 3.5 | 2.7 | 3.5 | 3.4 | 3.7 | 3.2 | 2.8 | 2.8 | 2.6 |
| 4 | 2.7 | 2.5 | 3.2 | 3.4 | 3.1 | 3.6 | 3.6 | 3.6 | 3.2 | 2.8 | 2.8 | 2.6 |
| 5 | 2.6 | 2.4 | 3.1 | 3.4 | 3.1 | 3.7 | 3.8 | 3.5 | 3.1 | 2.9 | 2.8 | 2.6 |
| 6 | 2.6 | 2.4 | 3.2 | 3.4 | 3.2 | 3.8 | 3.8 | 3.5 | 2.9 | 2.8 | 2.8 | 2.6 |
| 7 | 2.6 | 2.4 | 3.1 | 3.3 | 3.3 | 3.8 | 3.9 | 3.5 | 2.9 | 2.8 | 2.8 | 2.6 |
| 8 | 2.6 | 2.4 | 3.2 | 3.3 | 3.3 | 3.8 | 4.0 | 3.5 | 3.0 | 2.7 | 2.8 | 2.6 |
| 9 | 2.5 | 2.4 | 3.5 | 3.3 | 3.3 | 3.8 | 4.0 | 3.5 | 3.0 | 2.7 | 2.8 | 2.5 |
| 10 | 2.5 | 2.5 | 3.3 | 3.2 | 3.3 | 4.0 | 4.1 | 3.6 | 3.4 | 2.8 | 2.8 | 2.5 |
| 11 | 2.5 | 2.5 | 3.2 | 3.2 | 3.3 | 4.0 | 4.2 | 3.6 | 3.3 | 2.8 | 2.8 | 2.5 |
| 12 | 2.4 | 2.5 | 3.2 | 3.3 | 3.3 | 4.1 | 3.9 | 3.6 | 3.3 | 2.8 | 2.8 | 2.5 |
| 13 | 2.4 | 2.4 | 3.1 | 3.3 | 3.3 | 4.1 | 3.9 | 3.5 | 3.2 | 2.9 | 2.8 | 2.5 |
| 14 | 2.5 | 2.5 | 3.1 | 3.2 | 3.3 | 3.9 | 3.9 | 3.6 | 3.2 | 3.0 | 2.8 | 2.5 |
| 15 | 2.4 | 2.5 | 3.1 | 3.3 | 3.4 | 3.6 | 3.9 | 3.7 | 3.1 | 3.0 | 2.8 | 2.6 |

*Daily gage height, in feet, of Truckee River near Nevada-California State Line for 1899–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 16 | 2.5 | 2.6 | 3.1 | 3.4 | 3.3 | 3.6 | 4.0 | 3.6 | 3.0 | 3.0 | 2.8 | 2.5 |
| 17 | 2.4 | 2.7 | 3.1 | 3.3 | 3.3 | 3.8 | 4.1 | 3.6 | 3.0 | 3.0 | 2.8 | 2.5 |
| 18 | 2.4 | ..0 | 3.1 | 3.3 | 3.3 | 4.3 | 4.2 | 3.6 | 3.0 | 3.0 | 2.8 | 2.5 |
| 19 | 2.4 | 3.5 | 3.0 | 3.3 | 3.2 | 5.4 | 4.2 | 3.5 | 3.0 | 2.9 | 2.7 | 2.5 |
| 20 | 2.5 | 4.1 | 3.0 | 3.3 | 3.3 | 4.9 | 4.2 | 3.5 | 2.8 | 2.9 | 2.7 | 2.4 |
| 21 | 2.5 | 4.1 | 3.0 | 3.3 | 3.3 | 4.3 | 4.1 | 3.4 | 2.8 | 2.6 | 2.7 | 2.4 |
| 22 | 2.4 | 4.1 | 3.0 | 3.4 | 3.3 | 4.0 | 4.2 | 3.4 | 2.8 | 2.6 | 2.7 | 2.4 |
| 23 | 2.3 | 3.7 | 3.0 | 3.5 | 3.2 | 3.8 | 4.3 | 3.5 | 2.8 | 2.6 | 2.7 | 2.2 |
| 24 | 2.3 | 4.1 | 2.9 | 3.4 | 3.2 | 3.5 | 4.3 | 3.5 | 3.0 | 3.1 | 2.7 | 2.3 |
| 25 | 2.4 | 4.0 | 2.3 | 3.4 | 3.3 | 3.3 | 4.3 | 3.4 | 3.1 | 3.0 | 2.7 | 2.3 |
| 26 | 2.4 | 3.7 | 2.9 | 3.4 | 3.3 | 3.1 | 4.4 | 3.5 | 3.2 | 3.0 | 2.7 | 2.3 |
| 27 | 2.4 | 3.2 | 2.9 | 3.4 | 3.3 | 3.1 | 4.5 | 3.5 | 3.2 | 2.9 | 2.7 | 2.5 |
| 28 | 2.4 | 3.2 | 2.9 | 3.4 | 3.3 | 3.1 | 4.7 | 3.5 | 3.1 | 2.9 | 2.6 | 2.4 |
| 29 | 2.5 | 3.1 | 2.9 | 3.4 | ...... | 3.0 | 4.4 | 3.5 | 2.8 | 2.9 | 2.6 | 2.3 |
| 30 | 2.5 | 3.1 | 3.2 | 3.4 | ...... | 3.2 | 4.4 | 3.4 | 3.0 | 2.9 | 2.6 | 2.4 |
| 31 | 2.5 | ...... | 3.2 | 3.4 | ...... | 3.2 | ...... | 3.4 | ...... | 2.9 | 2.6 | ...... |
| **1910–11.** | | | | | | | | | | | | |
| 1 | 2.4 | 2.3 | 2.3 | 2.2 | 3.6 | 3.05 | 4.4 | 5.2 | 5.0 | 4.6 | 3.0 | 2.7 |
| 2 | 2.4 | 2.2 | 2.3 | 2.2 | 3.4 | 3.0 | 4.6 | 4.8 | 5.2 | 4.5 | 2.9 | 2.7 |
| 3 | 2.4 | 2.2 | 2.4 | 2.3 | 3.4 | 3.0 | 4.9 | 5.2 | 5.5 | 4.6 | 2.7 | 2.7 |
| 4 | 2.5 | 2.2 | 2.5 | 2.3 | 3.3 | 3.0 | 4.9 | 5.6 | 5.7 | 4.6 | 2.85 | 2.7 |
| 5 | 2.5 | 2.2 | 2.5 | 2.3 | 3.0 | 3.0 | 4.6 | 6.2 | 5.9 | 4.5 | 2.85 | 2.7 |
| 6 | 2.3 | 2.2 | 2.5 | 2.2 | 3.0 | 3.0 | 4.7 | 5.3 | 5.9 | 4.5 | 2.85 | 2.7 |
| 7 | 2.5 | 2.2 | 2.5 | 2.3 | 3.0 | 3.0 | 4.8 | 5.1 | 5.5 | 4.5 | 2.8 | 2.7 |
| 8 | 2.4 | 2.2 | 2.5 | 2.3 | 3.0 | 2.9 | 4.7 | 5.5 | 5.5 | 4.5 | 2.8 | 2.65 |
| 9 | 2.4 | 2.3 | 2.5 | 2.3 | 3.0 | 3.05 | 4.8 | 5.2 | 5.6 | 4.4 | 2.75 | 2.65 |
| 10 | 2.4 | 2.3 | 2.6 | 2.3 | 3.0 | 3.05 | 4.5 | 4.8 | 5.5 | 4.3 | 2.8 | 2.7 |
| 11 | 2.5 | 2.3 | 2.7 | 2.3 | 3.0 | 3.1 | 4.3 | 5.0 | 5.5 | 4.3 | 2.7 | 2.6 |
| 12 | 2.4 | 2.5 | 2.7 | 2.4 | 3.0 | 3.1 | 4.3 | 5.3 | 5.5 | 4.1 | 2.7 | 2.6 |
| 13 | 2.3 | 2.4 | 2.6 | 2.6 | 3.1 | 3.1 | 4.0 | 5.1 | 5.9 | 4.1 | 2.6 | 2.6 |
| 14 | 2.3 | 2.4 | 2.5 | 2.7 | 3.1 | 3.15 | 4.1 | 4.9 | 5.5 | 4.1 | 2.8 | 2.6 |
| 15 | 2.3 | 2.3 | 2.5 | 2.8 | 3.1 | 3.1 | 4.0 | 4.6 | 5.8 | 4.3 | 2.75 | 2.6 |
| 16 | 2.3 | 2.3 | 2.4 | 2.8 | 3.1 | 3.1 | 4.1 | 4.8 | 5.5 | 4.2 | 2.7 | 2.6 |
| 17 | 2.2 | 2.2 | 2.5 | 2.9 | 3.1 | 3.15 | 4.4 | 4.5 | 5.7 | 4.2 | 2.7 | 2.6 |
| 18 | 2.2 | 2.2 | 2.5 | 3.0 | 3.1 | 3.15 | 4.6 | 4.3 | 5.7 | 4.1 | 2.7 | 2.6 |
| 19 | 2.2 | 2.2 | 2.5 | 3.1 | 3.1 | 3.15 | 5.0 | 4.5 | 5.9 | 4.2 | 2.7 | 2.6 |
| 20 | 2.2 | 2.3 | 2.4 | 3.0 | 3.1 | 3.3 | 4.6 | 4.6 | 5.9 | 4.1 | 2.7 | 2.6 |
| 21 | 2.2 | 2.3 | 2.4 | 3.1 | 3.1 | 3.3 | 4.8 | 4.8 | 5.9 | 4.0 | 2.8 | 2.6 |
| 22 | 2.2 | 2.3 | 2.4 | 3.0 | 3.0 | 3.4 | 5.0 | 5.2 | 5.5 | 3.8 | 2.8 | 2.6 |
| 23 | 2.2 | 2.3 | 2.3 | 2.9 | 3.0 | 3.55 | 5.3 | 5.6 | 5.2 | 3.75 | 2.8 | 2.6 |
| 24 | 2.2 | 2.4 | 2.3 | 2.9 | 3.0 | 3.65 | 5.8 | 5.8 | 5.0 | 3.75 | 2.75 | 2.6 |
| 25 | 2.2 | 2.4 | 2.3 | 2.8 | 3.0 | 3.7 | 6.2 | 5.1 | 4.8 | 3.75 | 2.75 | 2.6 |
| 26 | 2.3 | 2.4 | 2.3 | 2.8 | 3.0 | 3.7 | 6.4 | 5.0 | 4.6 | 3.65 | 2.75 | 2.6 |
| 27 | 2.3 | 2.4 | 2.2 | 2.8 | 3.1 | 3.8 | 6.2 | 5.0 | 5.0 | 3.6 | 2.7 | 2.6 |
| 28 | 2.2 | 2.3 | 2.2 | 2.6 | 3.1 | 3.85 | 5.3 | 4.9 | 5.2 | 3.2 | 2.7 | 2.6 |
| 29 | 2.3 | 2.3 | 2.2 | 2.8 | ...... | 4.0 | 5.1 | 5.1 | 4.8 | 3.2 | 2.7 | 2.5 |
| 30 | 2.3 | 2.3 | 2.2 | 3.4 | ...... | 4.1 | 5.0 | 5.2 | 4.6 | 3.15 | 2.7 | 2.5 |
| 31 | 2.3 | ...... | 2.3 | 3.6 | ...... | 4.2 | ...... | 5.0 | ...... | 3.05 | 2.7 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| **1911–12.** | | | | | | | | | |
| 1 | 2.6 | 2.6 | 2.6 | 3.0 | 2.4 | 2.35 | 2.5 | 2.8 | 3.8 |
| 2 | 2.6 | 2.6 | 2.6 | 3.0 | 2.4 | 2.3 | 2.55 | 2.8 | 3.9 |
| 3 | 2.6 | 2.6 | 2.6 | 3.0 | 2.4 | 2.3 | 2.7 | 2.8 | 4.0 |
| 4 | 2.6 | 2.6 | 2.6 | 3.0 | 2.3 | 2.3 | 2.6 | 2.8 | 4.2 |
| 5 | 2.6 | 2.6 | 2.6 | 3.0 | 2.4 | 2.4 | 2.6 | 2.9 | 4.1 |
| 6 | 2.6 | 2.65 | 2.6 | 3.0 | 2.4 | 2.45 | 2.6 | 2.9 | 3.9 |
| 7 | 2.6 | 2.65 | 2.6 | 3.05 | 2.4 | 2.4 | 2.7 | 2.95 | 3.9 |
| 8 | 2.6 | 2.65 | 2.6 | 3.1 | 2.4 | 2.4 | 2.8 | 3.15 | 3.8 |
| 9 | 2.6 | 2.65 | 2.6 | 3.1 | 2.4 | 2.35 | 2.8 | 3.3 | 3.5 |
| 10 | 2.6 | 2.7 | 2.6 | 3.0 | 2.4 | 2.5 | 2.75 | 3.4 | 3.3 |
| 11 | 2.55 | 2.65 | 2.7 | 3.0 | 2.4 | 2.5 | 2.6 | 3.8 | 3.4 |
| 12 | 2.55 | 2.65 | 2.65 | 3.0 | 2.4 | 2.4 | 2.55 | 3.8 | 3.4 |
| 13 | 2.55 | 2.65 | 2.6 | 3.0 | 2.4 | 2.4 | 2.45 | 4.0 | 3.7 |
| 14 | 2.55 | 2.6 | 2.5 | 2.9 | 2.4 | 2.5 | 2.35 | 4.0 | 3.4 |
| 15 | 2.55 | 2.6 | 2.55 | 2.9 | 2.4 | 2.4 | 2.4 | 4.0 | 3.2 |

*Daily gage height, in feet, of Truckee River near Nevada-California State line, for 1899–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 16 | 2.55 | 2.65 | 2.6 | 2.9 | 2.4 | 2.4 | 2.35 | 4.2 | [illegible] |
| 17 | 2.6 | 2.65 | 2.55 | 2.65 | 2.4 | 2.5 | 2.5 | 4.0 | [illegible] |
| 18 | 2.6 | 2.65 | 2.5 | 2.6 | 2.45 | 2.5 | 2.6 | 4.1 | [illegible] |
| 19 | 2.6 | 2.65 | 2.55 | 2.35 | 2.5 | 2.5 | 2.6 | 4.1 | [illegible] |
| 20 | 2.6 | 2.65 | 2.5 | 2.4 | 2.45 | 2.55 | 2.45 | 3.7 | [illegible] |
| 21 | 2.6 | 2.65 | 2.6 | 2.4 | 2.45 | 2.4 | 2.3 | 3.6 | [illegible] |
| 22 | 2.55 | 2.65 | 2.5 | 2.4 | 2.4 | 2.4 | 2.45 | 3.3 | [illegible] |
| 23 | 2.55 | 2.6 | 2.6 | 2.4 | 2.45 | 2.4 | 2.35 | 3.2 | [illegible] |
| 24 | 2.55 | 2.65 | 2.6 | 2.35 | 2.4 | 2.3 | 2.45 | 3.1 | [illegible] |
| 25 | 2.55 | 2.6 | 2.9 | 2.4 | 2.45 | 2.5 | 2.5 | 3.1 | [illegible] |
| 26 | 2.55 | 2.6 | 2.9 | 2.4 | 2.4 | 2.55 | 2.5 | 3.1 | [illegible] |
| 27 | 2.6 | 2.6 | 2.9 | 2.4 | 2.4 | 2.6 | 2.5 | [illegible] | [illegible] |
| 28 | 2.6 | 2.65 | 2.9 | 2.3 | 2.4 | 2.6 | 2.6 | 3.3 | [illegible] |
| 29 | 2.6 | 2.6 | 2.9 | 2.45 | 2.4 | 2.7 | 2.7 | 3.65 | [illegible] |
| 30 | 2.6 | 2.65 | 2.9 | 2.4 | ........ | 2.6 | 2.8 | 3.9 | 2.4 |
| 31 | 2.6 | ........ | 2.85 | 2.4 | ........ | 2.3 | ........ | 3.75 | ..... |

NOTE.—Beginning July 1, 1909, gage heights refer to new gage. No relation determined between the new and old gage.

*Rating tables for Truckee River at Nevada-California State line.*

**September 7, [illegible], to December 31, [illegible].**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 1.60 | 205 | 2.40 | 486 | 3.20 | 897 | 4.00 | 1,409 |
| 1.80 | 264 | 2.60 | 582 | 3.40 | 1,010 | 4.20 | 1,566 |
| 2.00 | 328 | 2.80 | 683 | 3.60 | 1,131 | 4.40 | 1,725 |
| 2.20 | 401 | 3.00 | 788 | 3.80 | 1,264 | 4.60 | 1,886 |

**January 1, [illegible], to December 31, [illegible].**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.30 | 247 | 2.30 | 613 | 3.30 | 1,268 | 4.30 | 2,173 |
| 1.40 | 268 | 2.40 | 671 | 3.40 | 1,345 | 4.40 | 2,280 |
| 1.50 | 292 | 2.50 | 732 | 3.50 | 1,425 | 4.50 | 2,391 |
| 1.60 | 319 | 2.60 | 795 | 3.60 | 1,508 | 4.60 | 2,505 |
| 1.70 | 349 | 2.70 | 859 | 3.70 | 1,594 | 4.80 | 2,745 |
| 1.80 | 383 | 2.80 | 924 | 3.80 | 1,683 | 5.00 | 3,002 |
| 1.90 | 421 | 2.90 | 989 | 3.90 | 1,775 | 5.20 | 3,283 |
| 2.00 | 463 | 3.00 | 1,055 | 4.00 | 1,870 | 5.40 | 3,596 |
| 2.10 | 509 | 3.10 | 1,123 | 4.10 | 1,968 | 5.60 | 3,953 |
| 2.20 | 550 | 3.20 | 1,194 | 4.20 | 2,069 | 5.80 | 4,370 |

**January 1 to December 31, 1904.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.60 | 230 | 2.80 | 958 | 4.00 | 2,070 | 5.20 | 3,370 |
| 1.70 | 271 | 2.90 | 1,040 | 4.10 | 2,170 | 5.30 | 3,490 |
| 1.80 | 314 | 3.00 | 1,126 | 4.20 | 2,270 | 5.40 | 3,610 |
| 1.90 | 361 | 3.10 | 1,213 | 4.30 | 2,370 | 5.50 | 3,730 |
| 2.00 | 412 | 3.20 | 1,302 | 4.40 | 2,470 | 5.60 | 3,850 |
| 2.10 | 467 | 3.30 | 1,393 | 4.50 | 2,580 | 5.70 | 3,970 |
| 2.20 | 528 | 3.40 | 1,486 | 4.60 | 2,690 | 5.80 | 4,090 |
| 2.30 | 589 | 3.50 | 1,580 | 4.70 | 2,800 | 5.90 | 4,210 |
| 2.40 | 656 | 3.60 | 1,678 | 4.80 | 2,910 | 6.00 | 4,330 |
| 2.50 | 725 | 3.70 | 1,772 | 4.90 | 3,020 | 6.20 | 4,570 |
| 2.60 | 798 | 3.80 | 1,870 | 5.00 | 3,130 | 6.40 | 4,810 |
| 2.70 | 875 | 3.90 | 1,970 | 5.10 | 3,250 | | |

NOTE.—Table applicable only to open channel. It is based upon 15 discharge measurements made during 1903 and 1904 and is well defined between gage heights 2.10 feet and 5.75 feet.

*Rating tables for Truckee River at Nevada-California State line*—Continued.

**January 1, 1905, to April 15, 1906.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 1.70 | 300 | 2.10 | 496 | 2.50 | 740 | 2.90 | 1,042 |
| 1.80 | 346 | 2.20 | 551 | 2.60 | 810 | 3.00 | 1,126 |
| 1.90 | 394 | 2.30 | 610 | 2.75 | 884 | | |
| 2.00 | 444 | 2.40 | 673 | 2.80 | 961 | | |

NOTE.—Table applicable only to open channel. It is based on discharge measurement made during 1903-1906 and is well defined. Above gage height 3.00 feet it is the same as the 1904 table.

**April 16, 1906, to March 16, 1907.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.30 | 460 | 3.30 | 1,155 | 4.30 | 2,100 | 5.60 | 3,480 |
| 2.40 | 520 | 3.40 | 1,240 | 4.40 | 2,200 | 5.80 | 3,710 |
| 2.50 | 580 | 3.50 | 1,325 | 4.50 | 2,300 | 6.00 | 3,950 |
| 2.60 | 645 | 3.60 | 1,415 | 4.60 | 2,400 | 6.20 | 4,190 |
| 2.70 | 710 | 3.70 | 1,510 | 4.70 | 2,500 | 6.40 | 4,430 |
| 2.80 | 780 | 3.80 | 1,605 | 4.80 | 2,600 | 6.60 | 4,670 |
| 2.90 | 850 | 3.90 | 1,700 | 4.90 | 2,710 | 6.80 | 4,920 |
| 3.00 | 920 | 4.00 | 1,800 | 5.00 | 2,820 | 7.00 | 5,180 |
| 3.10 | 995 | 4.10 | 1,900 | 5.20 | 3,040 | 7.20 | 5,440 |
| 3.20 | 1,075 | 4.20 | 2,000 | 5.40 | 3,260 | | |

NOTE.—Table applicable only to open channel. It is based on 4 discharge measurements made during 1906 and the form of the previous curve, and is fairly well defined above gage heights 3 feet.

**March 17, 1907, to May 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.70 | 300 | 3.10 | 1,213 | 4.50 | 2,620 | 6.80 | 6,060 |
| 1.80 | 346 | 3.20 | 1,302 | 4.60 | 2,740 | 7.00 | 6,420 |
| 1.90 | 394 | 3.30 | 1,393 | 4.70 | 2,860 | 7.20 | 6,780 |
| 2.00 | 444 | 3.40 | 1,486 | 4.80 | 2,990 | 7.40 | 7,160 |
| 2.10 | 496 | 3.50 | 1,580 | 4.90 | 3,120 | 7.60 | 7,540 |
| 2.20 | 551 | 3.60 | 1,676 | 5.00 | 3,250 | 7.80 | 7,920 |
| 2.30 | 610 | 3.70 | 1,772 | 5.20 | 3,530 | 8.00 | 8,300 |
| 2.40 | 673 | 3.80 | 1,870 | 5.40 | 3,810 | 9.00 | 10,300 |
| 2.50 | 740 | 3.90 | 1,970 | 5.60 | 4,100 | 10.00 | 12,300 |
| 2.60 | 810 | 4.00 | 2,070 | 5.80 | 4,400 | 11.00 | 14,300 |
| 2.70 | 884 | 4.10 | 2,180 | 6.00 | 4,720 | 12.00 | 16,300 |
| 2.80 | 961 | 4.20 | 2,290 | 6.20 | 5,040 | | |
| 2.90 | 1,042 | 4.30 | 2,400 | 6.40 | 5,380 | | |
| 3.00 | 1,126 | 4.40 | 2,510 | 6.60 | 5,720 | | |

NOTE.—Table applicable only to open channel. It is based on discharge measurements made during 1903 to 1908, and is well defined between gage heights 1.9 feet and 5.0 feet. Above gage height 5.0 feet the rating table is only approximate.

**June 1 to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.90 | 310 | 2.20 | 470 | 2.50 | 670 | 2.80 | 920 |
| 2.00 | 360 | 2.30 | 530 | 2.60 | 750 | 2.90 | 1,020 |
| 2.10 | 410 | 2.40 | 600 | 2.70 | 830 | 3.00 | 1,126 |

NOTE.—Table applicable only to open channel. It is based on 3 discharge measurements made during the period and on earlier high-water measurements, and is fairly well defined above gage height 2.1 feet. Above gage height 3.0 feet it is the same as the previous table.

*Daily discharge, in second-feet, of Truckee River at Nevada-California State line for 1909–1912*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 385 | 1,070 | 1,070 | 1,470 | 3.700 | 3,190 | 2,620 | 950 | 735 |
| 2 | 410 | 1,200 | 1,030 | 1,560 | 3,700 | 3,540 | 2,620 | 950 | 735 |
| 3 | 410 | 1,160 | 1,110 | 1,660 | 3,770 | 3,540 | 2,480 | 950 | 735 |
| 4 | 550 | 1,160 | 1,200 | 1,810 | 4,000 | 3,540 | 2,350 | 950 | 800 |
| 5 | 870 | 1,110 | 1,110 | 1,760 | 4,540 | 3,540 | 2,220 | 870 | 735 |
| 6 | 1,030 | 1,110 | 1,110 | 1,660 | 4,460 | 3,190 | 2,090 | 870 | 735 |
| 7 | 685 | 1,030 | 1,110 | 1,760 | 4,540 | 2,920 | 1,730 | 800 | 675 |
| 8 | 490 | 1,030 | 1,070 | 1,860 | 4,220 | 2,920 | 1,620 | 800 | 675 |
| 9 | 410 | 1,030 | 1,030 | 1,960 | 4,070 | 2,720 | 1,410 | 735 | 675 |
| 10 | 385 | 1,110 | 1,030 | 2,300 | 4,220 | 2,660 | 1,210 | 675 | 620 |
| 11 | 460 | 1,200 | 1,030 | 2,180 | 3,700 | 2,660 | 1,210 | 675 | 620 |
| 12 | 580 | 1,200 | 1,070 | 2,300 | 3,330 | 2,720 | 1,210 | 620 | 620 |
| 13 | 950 | 1,200 | 1,030 | 2,660 | 2,860 | 2,860 | 1,030 | 620 | 565 |
| 14 | 3,920 | 1,160 | 1,110 | 3,190 | 2,600 | 2,790 | 1,030 | 620 | 565 |
| 15 | 7,260 | 1,200 | 1,200 | 3,540 | 2,980 | 2,860 | 950 | 620 | 565 |
| 16 | 8,110 | 1,160 | 1,200 | 3,050 | 2,420 | 2,720 | 950 | 620 | 565 |
| 17 | 4,960 | 1,200 | 1,380 | 4,000 | 2,300 | 2,720 | 870 | 675 | 565 |
| 18 | 4,140 | 1,340 | 1,470 | 4,380 | 2,240 | 2,660 | 800 | 735 | 620 |
| 19 | 2,860 | 1,290 | 1,380 | 4,300 | 2,300 | 2,480 | 735 | 735 | 620 |
| 20 | 2,720 | 1,290 | 1,380 | 2,980 | 2,480 | 2,300 | 735 | 735 | 620 |
| 21 | 3,400 | 1,200 | 1,340 | 3,050 | 2,600 | 2,420 | 735 | 735 | 620 |
| 22 | 2,070 | 1,110 | 1,290 | 2,860 | 2,120 | 2,720 | 735 | 735 | 565 |
| 23 | 1,660 | 1,160 | 1,240 | 3,050 | 1,910 | 2,920 | 800 | 735 | 565 |
| 24 | 1,560 | 1,200 | 1,200 | 3,120 | 1,810 | 2,720 | 1,030 | 800 | 620 |
| 25 | 1,520 | 1,070 | 1,200 | 3,330 | 1,810 | 2,860 | 1,030 | 800 | 620 |
| 26 | 1,470 | 1,030 | 1,160 | 2,860 | 2,120 | 2,720 | 1,030 | 800 | 620 |
| 27 | 1,470 | 1,030 | 1,160 | 3,840 | 2,300 | 2,720 | 1,030 | 800 | 620 |
| 28 | 1,380 | 1,070 | 1,160 | 4,000 | 2,540 | 2,660 | 950 | 800 | 620 |
| 29 | 1,290 | ........ | 1,160 | 3,920 | 2,070 | 2,540 | 950 | 735 | 675 |
| 30 | 1,200 | ........ | 1,110 | 3,920 | 1,960 | 2,660 | 950 | 735 | 675 |
| 31 | 1,110 | ........ | 1,160 | ........ | 2,240 | ........ | 950 | 735 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 675 | 565 | 1,730 | 735 | 1,310 | 1,210 | 1,060 | 2,040 | 1,260 | 703 | 786 | 562 |
| 2 | 675 | 565 | 2,620 | 1,510 | 1,310 | 1,210 | 1,160 | 1,920 | 1,160 | 703 | 786 | 562 |
| 3 | 675 | 565 | 1,730 | 1,410 | 735 | 1,410 | 1,260 | 1,580 | 1,060 | 703 | 703 | 562 |
| 4 | 735 | 620 | 1,120 | 1,310 | 1,030 | 1,510 | 1,470 | 1,470 | 1,060 | 703 | 703 | 562 |
| 5 | 675 | 565 | 1,030 | 1,310 | 1,030 | 1,620 | 1,690 | 1,360 | 964 | 786 | 703 | 562 |
| 6 | 675 | 565 | 1,120 | 1,310 | 1,120 | 1,730 | 1,690 | 1,360 | 786 | 703 | 703 | 562 |
| 7 | 675 | 565 | 1,030 | 1,210 | 1,210 | 1,730 | 1,800 | 1,360 | 786 | 703 | 703 | 562 |
| 8 | 675 | 565 | 1,120 | 1,210 | 1,210 | 1,730 | 1,920 | 1,360 | 873 | 628 | 703 | 562 |
| 9 | 620 | 565 | 1,410 | 1,210 | 1,210 | 1,730 | 1,920 | 1,360 | 873 | 628 | 703 | 504 |
| 10 | 620 | 620 | 1,210 | 1,120 | 1,210 | 1,970 | 2,040 | 1,470 | 1,260 | 703 | 703 | 504 |
| 11 | 620 | 620 | 1,120 | 1,120 | 1,210 | 1,970 | 2,160 | 1,470 | 1,160 | 703 | 703 | 504 |
| 12 | 565 | 620 | 1,120 | 1,210 | 1,210 | 2,090 | 1,800 | 1,470 | 1,160 | 703 | 703 | 504 |
| 13 | 565 | 565 | 1,030 | 1,210 | 1,210 | 2,090 | 1,800 | 1,360 | 1,060 | 786 | 703 | 504 |
| 14 | 620 | 620 | 1,030 | 1,120 | 1,210 | 1,850 | 1,800 | 1,470 | 1,060 | 873 | 703 | 504 |
| 15 | 565 | 620 | 1,030 | 1,210 | 1,310 | 1,510 | 1,800 | 1,580 | 964 | 873 | 703 | 562 |
| 16 | 620 | 675 | 1,030 | 1,310 | 1,210 | 1,510 | 1,920 | 1,470 | 873 | 873 | 703 | 504 |
| 17 | 565 | 735 | 1,030 | 1,210 | 1,210 | 1,730 | 2,040 | 1,470 | 873 | 873 | 703 | 504 |
| 18 | 565 | 950 | 1,030 | 1,210 | 1,210 | 2,350 | 2,160 | 1,470 | 873 | 873 | 703 | 50 |
| 19 | 565 | 1,410 | 950 | 1,210 | 1,120 | 3,890 | 2,160 | 1,360 | 873 | 786 | 628 | 50 |
| 20 | 620 | 2,090 | 950 | 1,210 | 1,210 | 3,080 | 2,160 | 1,360 | 703 | 786 | 628 | 45 |
| 21 | 620 | 2,090 | 950 | 1,210 | 1,210 | 2,290 | 2,040 | 1,260 | 703 | 562 | 628 | 45 |
| 22 | 565 | 2,090 | 950 | 1,310 | 1,210 | 1,920 | 2,160 | 1,260 | 703 | 562 | 628 | 45 |
| 23 | 515 | 1,620 | 950 | 1,410 | 1,120 | 1,690 | 2,290 | 1,360 | 703 | 562 | 628 | 38 |
| 24 | 515 | 2,090 | 870 | 1,310 | 1,120 | 1,360 | 2,290 | 1,360 | 873 | 964 | 628 | 41 |
| 25 | 565 | 1,970 | 515 | 1,310 | 1,210 | 1,160 | 2,290 | 1,260 | 964 | 873 | 628 | 41 |
| 26 | 565 | 1,620 | 870 | 1,310 | 1,210 | 964 | 2,420 | 1,360 | 1,060 | 873 | 628 | 41 |
| 27 | 565 | 1,120 | 870 | 1,310 | 1,210 | 964 | 2,550 | 1,360 | 1,060 | 786 | 628 | 50 |
| 28 | 565 | 1,120 | 870 | 1,310 | 1,210 | 964 | 2,810 | 1,360 | 964 | 786 | 562 | 45 |
| 29 | 620 | 1,030 | 870 | 1,310 | ....... | 873 | 2,420 | 1,360 | 703 | 786 | 562 | 41 |
| 30 | 620 | 1,030 | 1,120 | 1,310 | ....... | 1,060 | 2,420 | 1,260 | 873 | 786 | 562 | 45 |
| 31 | 620 | ....... | 1,120 | 1,310 | ....... | 1,060 | ....... | 1,260 | ....... | 786 | 562 | ..... |

*Daily discharge, in second-feet, of [illegible] at Nevada-California State line for 1910–1912—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June. | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1910-11.** | | | | | | | | | | | | |
| 1 | 457 | 425 | [illegible] | 385 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 |
| 2 | 457 | 385 | [illegible] | 385 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 |
| 3 | 457 | 385 | 457 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 |
| 4 | 504 | 385 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 744 | 628 |
| 5 | 504 | 385 | 364 | 425 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 744 | 628 |
| 6 | 415 | 385 | 364 | 385 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 744 | [illegible] |
| 7 | 504 | 385 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | 457 | 385 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 457 | 425 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | 457 | 425 | [illegible] | 425 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 |
| 11 | 504 | 425 | [illegible] | 425 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 562 |
| 12 | 457 | 364 | [illegible] | 457 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 562 |
| 13 | [illegible] | 457 | [illegible] | [illegible] | 364 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | 562 | 562 |
| 14 | 415 | 457 | 364 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 562 |
| 15 | 415 | 425 | 364 | [illegible] | 364 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | 666 | 562 |
| 16 | 425 | 425 | 457 | [illegible] | 364 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 498 |
| 17 | 385 | 385 | 364 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 498 |
| 18 | 385 | 385 | 364 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 498 |
| 19 | 385 | 385 | 364 | 364 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 498 |
| 20 | 385 | [illegible] | 457 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 498 |
| 21 | 385 | 425 | 457 | 364 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 703 | 498 |
| 22 | 385 | 415 | 457 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 703 | 498 |
| 23 | 385 | 425 | 425 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 703 | 498 |
| 24 | 385 | 457 | 425 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 666 | 498 |
| 25 | 385 | 457 | 415 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 666 | 498 |
| 26 | 418 | 457 | 425 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1,540 | 666 | 498 |
| 27 | 418 | 457 | 385 | [illegible] | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 498 |
| 28 | 385 | 415 | 385 | 562 | 364 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 498 |
| 29 | 418 | 415 | 385 | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 628 | 432 |
| 30 | 418 | 415 | 385 | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 1,010 | 628 | 432 |
| 31 | 418 | ...... | 425 | [illegible] | ...... | [illegible] | ...... | [illegible] | ...... | 915 | 628 | ...... |

| Day. | Oct. | Nov | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| **1911-12.** | | | | | | | | | |
| 1 | 498 | 498 | 498 | 815 | 376 | 353 | 432 | 645 | 1,710 |
| 2 | 498 | 498 | 498 | 815 | 376 | 330 | 465 | 645 | 1,840 |
| 3 | 498 | 498 | 498 | 815 | 376 | 330 | 570 | 645 | 1,970 |
| 4 | 498 | 498 | 498 | 815 | 330 | 330 | 498 | 645 | 2,230 |
| 5 | 498 | 498 | 498 | 815 | 376 | 376 | 498 | 730 | 2,100 |
| 6 | 498 | 534 | 498 | 815 | 376 | 404 | 498 | 730 | 1,840 |
| 7 | 498 | 534 | 498 | 862 | 376 | 376 | 570 | 772 | 1,840 |
| 8 | 498 | 534 | 498 | 910 | 376 | 376 | 645 | 900 | 1,710 |
| 9 | 498 | 534 | 498 | 910 | 376 | 353 | 645 | 1,110 | 1,330 |
| 10 | 498 | 570 | 498 | 815 | 376 | 432 | 606 | 1,220 | 1,110 |
| 11 | 465 | 534 | 570 | 815 | 376 | 432 | 498 | 1,710 | 1,220 |
| 12 | 465 | 534 | 534 | 815 | 376 | 376 | 465 | 1,710 | 1,220 |
| 13 | 465 | 534 | 498 | 815 | 376 | 376 | 404 | 1,970 | 1,580 |
| 14 | 465 | 498 | 432 | 730 | 376 | 432 | 353 | 1,970 | 1,220 |
| 15 | 465 | 498 | 465 | 730 | 376 | 376 | 376 | 1,970 | 1,010 |
| 16 | 465 | 534 | 498 | 730 | 376 | 376 | 353 | 2,230 | 815 |
| 17 | 498 | 534 | 465 | 534 | 376 | 432 | 432 | 1,970 | 818 |
| 18 | 498 | 534 | 432 | 498 | 404 | 432 | 498 | 2,100 | 815 |
| 19 | 498 | 534 | 465 | 353 | 432 | 432 | 498 | 2,100 | 730 |
| 20 | 498 | 534 | 432 | 376 | 404 | 465 | 404 | 1,580 | 730 |
| 21 | 498 | 534 | 498 | 376 | 404 | 376 | 330 | 1,450 | 645 |
| 22 | 465 | 534 | 432 | 376 | 376 | 376 | 404 | 1,110 | 645 |
| 23 | 465 | 498 | 498 | 376 | 404 | 376 | 353 | 1,010 | 498 |
| 24 | 465 | 534 | 498 | 353 | 376 | 330 | 404 | 910 | 570 |
| 25 | 465 | 498 | 730 | 376 | 404 | 432 | 432 | 910 | 498 |
| 26 | 465 | 498 | 730 | 376 | 376 | 465 | 432 | 910 | 432 |
| 27 | 498 | 498 | 730 | 376 | 376 | 498 | 432 | 910 | 432 |
| 28 | 498 | 534 | 730 | 330 | 376 | 498 | 498 | 1,110 | 432 |
| 29 | 498 | 498 | 730 | 404 | 376 | 570 | 570 | 1,520 | 432 |
| 30 | 498 | 534 | 730 | 376 | ...... | 498 | 645 | 1,840 | 376 |
| 31 | 498 | ...... | 688 | 376 | ...... | 330 | ...... | 1,640 | ...... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to June 30, 1909, fairly well defined between 360 and 3,190 second-feet; July 1 to Dec. 31, 1909, fairly well defined between [illegible] and 2,760 second-feet; Jan. 1, 1910, to June 30, 1912, well defined above 700 second-feet.

*Monthly discharge of Truckee River near Nevada-California State line, for 1899–1912.*

[Drainage area, 955 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet | |
| **1899.** | | | | | | | |
| September 17–30 | 303 | 295 | 303 | 0.32 | 0.36 | 18,030 | |
| **1899–1900.** | | | | | | | |
| October | 632 | 295 | 354 | .37 | .43 | 21,767 | |
| November | 1,566 | 295 | 581 | .61 | .68 | 34,572 | |
| December | 328 | 264 | 295 | .31 | .36 | 18,139 | |
| January | 897 | 295 | 392 | .41 | .47 | 24,103 | |
| February | 363 | 264 | 318 | .33 | .34 | 17,661 | |
| March | 1,131 | 295 | 797 | .83 | .96 | 49,006 | |
| April | 1,409 | 735 | 902 | .94 | 1.05 | 53,673 | |
| May | 1,885 | 1,196 | 1.528 | 1.60 | 1.84 | 93,953 | |
| June | 1,409 | 328 | 950 | .99 | 1.10 | 56,529 | |
| July | 533 | 401 | 459 | .48 | .55 | 28,223 | |
| August | 486 | 328 | 396 | .41 | .47 | 24,349 | |
| September | 486 | 205 | 367 | .38 | .42 | 21,838 | |
| The year | 1,885 | 205 | 612 | .641 | 8.67 | 444,000 | |
| **1900–1901.** | | | | | | | |
| October | 897 | 234 | 481 | .50 | .58 | 29,575 | |
| November | 897 | 328 | 480 | .50 | .56 | 28,562 | |
| December | 1,131 | 205 | 407 | .43 | .50 | 25,025 | |
| January | 559 | 230 | 314 | .329 | .38 | 19,308 | |
| February | 3,435 | 247 | 1.082 | 1.133 | 1.18 | 60,092 | |
| March | 2,280 | 732 | 1,280 | 1.340 | 1.54 | 78,708 | |
| April | 2,505 | 613 | 1,476 | 1.545 | 1.73 | 87,829 | |
| May | 4,370 | 1,508 | 2.478 | 2.595 | 2.99 | 152,370 | |
| June | 2.505 | 989 | 1,595 | 1.670 | 1.86 | 94,910 | |
| July | 1,194 | 421 | 686 | .718 | .83 | 42,181 | |
| August | 795 | 349 | 486 | .509 | .59 | 29,884 | |
| September | 559 | 247 | 472 | .494 | .55 | 28,086 | |
| The year | 4,370 | 205 | 936 | .980 | 13.29 | 677.000 | |
| **1901–2.** | | | | | | | |
| October | 559 | 247 | 470 | .492 | .57 | 28,900 | |
| November | 613 | 383 | 469 | .491 | .55 | 27,908 | |
| December | 1,194 | 247 | 445 | .466 | .54 | 27,347 | |
| January | 421 | 268 | 322 | .337 | .39 | 19,799 | |
| February | 1,194 | 268 | 506 | .530 | .55 | 28.102 | |
| March | 671 | 292 | 402 | .421 | .49 | 24,718 | |
| April | 3.596 | 509 | 1.656 | 1.734 | 1.93 | 98,539 | |
| May | 2,745 | 1,194 | 1,927 | 2.018 | 2.33 | 118,487 | |
| June | 1,968 | 732 | 1,358 | 1.422 | 1.59 | 80,807 | |
| July | 1.055 | 349 | 501 | .525 | .61 | 30,805 | |
| August | 559 | 383 | 506 | .530 | .61 | 31,113 | |
| September | 559 | 421 | 482 | .505 | .56 | 28,681 | |
| The year | 3.596 | 247 | 754 | .789 | 10.72 | 545,900 | |
| **1902–3.** | | | | | | | |
| October | 559 | 383 | 450 | .471 | .54 | 27,669 | |
| November | 732 | 292 | 416 | .436 | .49 | 24,754 | |
| December | 671 | 383 | 482 | .505 | .58 | 29,637 | |
| January | 989 | 292 | 522 | .55 | .63 | 32,097 | |
| February | 586 | 280 | 463 | .49 | .51 | 25,714 | |
| March | 3,211 | 334 | 686 | .72 | .83 | 42.180 | |
| April | 1,968 | 891 | 1,301 | 1.36 | 1.52 | 77,415 | |
| May | 2,391 | 969 | 1,658 | 1.74 | 2.01 | 101,946 | |
| June | 1,822 | 720 | 1,148 | 1.20 | 1.34 | 68,311 | |
| July | 846 | 455 | 513 | .54 | .62 | 31,543 | |
| August | 613 | 463 | 490 | .51 | .59 | 30,129 | |
| September | 559 | 421 | 489 | .51 | .57 | 29,098 | |
| The year | 3,211 | 280 | 718 | .752 | 10.23 | 520,000 | |

*Monthly discharge of Truckee River near Nevada-California State line, for 1899–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1903–4.** | | | | | | | |
| October | 613 | 442 | 507 | 0.53 | 0.61 | 31,174 | |
| November | 2,745 | 421 | 855 | .90 | 1.00 | 50,876 | |
| December | 486 | 292 | 403 | .42 | .48 | 24,780 | |
| January | 725 | 230 | 419 | .439 | .51 | 25,760 | |
| February | 6,730 | 337 | 1,351 | 1.41 | 1.52 | 77,710 | |
| March | 4,930 | 1,257 | 2,469 | 2.59 | 2.99 | 151,800 | |
| April | 4,906 | 2,020 | 2,897 | 3.03 | 3.38 | 172,400 | |
| May | 4,930 | 2,220 | 3,706 | 3.88 | 4.47 | 227,900 | |
| June | 3,550 | 2,120 | 2,751 | 2.88 | 3.21 | 163,700 | |
| July | 2,020 | 1,083 | 1,497 | 1.57 | 1.81 | 92,050 | |
| August | 1,257 | 836 | 1,017 | 1.06 | 1.22 | 62,530 | |
| September | 1,083 | 836 | 903 | .946 | 1.06 | 53,730 | |
| The year | 6,730 | 230 | 1,560 | 1.64 | 22.26 | 1,130,000 | |
| **1904–5.** | | | | | | | |
| October | 1,821 | 739 | 1,029 | 1.08 | 1.24 | 63,270 | |
| November | 1,083 | 798 | 893 | .935 | 1.04 | 53,140 | |
| December | 1,393 | 725 | 834 | .873 | 1.01 | 51,280 | |
| January | 961 | 551 | 755 | .791 | .91 | 46,420 | |
| February | 1,228 | 580 | 754 | .789 | .82 | 41,880 | |
| March | 1,393 | 610 | 1,096 | 1.15 | 1.33 | 67,390 | |
| April | 2,090 | 673 | 1,114 | 1.17 | 1.30 | 66,290 | |
| May | 2,020 | 1,042 | 1,453 | 1.52 | 1.75 | 89,340 | |
| June | 1,439 | 642 | 1,115 | 1.17 | 1.30 | 66,350 | |
| July | 642 | 444 | 548 | .574 | .66 | 33,700 | |
| August | 540 | 444 | 503 | .527 | .61 | 30,930 | |
| September | 524 | 444 | 477 | .499 | .56 | 28,380 | |
| The year | 2,090 | 444 | 881 | .923 | 12.53 | 638,000 | |
| **1905–6.** | | | | | | | |
| October | 551 | 444 | 487 | .510 | .59 | 29,940 | |
| November | 454 | 300 | 405 | .424 | .47 | 24,100 | |
| December | 429 | 300 | 366 | .333 | .44 | 22,500 | |
| January | 1,290 | 309 | 592 | .620 | .71 | 36,400 | |
| February | 1,040 | 580 | 746 | .781 | .81 | 41,400 | |
| March | 1,970 | 740 | 1,130 | 1.18 | 1.36 | 69,500 | |
| April | 5,120 | 1,130 | 2,850 | 2.98 | 3.32 | 170,000 | |
| May | 5,410 | 1,600 | 3,650 | 3.82 | 4.40 | 224,000 | |
| June | 4,250 | 1,800 | 2,830 | 2.96 | 3.30 | 168,000 | |
| July | 2,820 | 920 | 1,800 | 1.88 | 2.17 | 111,000 | |
| August | 850 | 645 | 763 | .799 | .92 | 46,900 | |
| September | 745 | 645 | 675 | .707 | .79 | 40,200 | |
| The year | 5.410 | 300 | 1,360 | 1.42 | 19.28 | 984,000 | |
| **1906–7.** | | | | | | | |
| October | 745 | 490 | 629 | .659 | .76 | 38,700 | |
| November | 906 | 550 | 670 | .702 | .78 | 39,900 | |
| December | 906 | 550 | 662 | .693 | .80 | 40,700 | |
| January | 850 | 645 | 702 | .735 | .85 | 43,200 | B. |
| February | 1,850 | 850 | 1,220 | 1.28 | 1.33 | 67,800 | B. |
| March | 15,300 | 920 | 2,590 | 2.71 | 3.12 | 159,000 | C. |
| April | 6,420 | 2,070 | 3,880 | 4.06 | 4.53 | 231,000 | B. |
| May | 5,210 | 3,250 | 3,980 | 4.17 | 4.81 | 245,000 | B. |
| June | 4,960 | 2,560 | 3,570 | 3.74 | 4.17 | 212,000 | A. |
| July | 3,810 | 2,180 | 2,720 | 2.85 | 3.29 | 167,000 | A. |
| August | 2,120 | 1,490 | 1,680 | 1.76 | 2.03 | 103,000 | A. |
| September | 1,530 | 1,300 | 1,430 | 1.50 | 1.67 | 85,100 | A. |
| The year | 15,300 | 490 | 1,980 | 2.07 | 28.14 | 1,430,000 | |
| **1907–8.** | | | | | | | |
| October | 1,390 | 673 | 1,200 | 1.26 | 1.45 | 73,800 | A. |
| November | 1,210 | 884 | 1,080 | 1.13 | 1.26 | 64,300 | A. |
| December | 1,350 | 884 | 1,040 | 1.09 | 1.26 | 64,000 | B. |
| January | 1,130 | 961 | 1,020 | 1.07 | 1.23 | 62,700 | B. |
| February | 1,130 | 884 | 938 | .982 | 1.06 | 54,000 | B. |
| March | 1,580 | 884 | 1,140 | 1.19 | 1.37 | 70,100 | B. |
| April | 1,870 | 961 | 1,360 | 1.42 | 1.58 | 80,900 | B. |
| May | 1,530 | 810 | 1,040 | 1.09 | 1.26 | 64,000 | B. |
| June | 1,260 | 600 | 893 | .935 | 1.04 | 53,100 | B. |
| July | 790 | 440 | 550 | .576 | .66 | 33,800 | B. |
| August | 750 | 440 | 544 | .570 | .66 | 33,400 | B. |
| September | 500 | 360 | 448 | .469 | .52 | 26,700 | B. |
| The year | 1,870 | 360 | 938 | .982 | 13.35 | 681,000 | |

*Monthly discharge of Truckee River near Nevada-California State line, for 1899–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1908–9.** | | | | | | | |
| October | 670 | 335 | 445 | 0.466 | 0.54 | 27,400 | B. |
| November | 470 | 360 | 394 | .413 | .46 | 23,400 | B. |
| December | 410 | 310 | 370 | .387 | .45 | 22,800 | B. |
| January | 8,110 | 385 | 1,930 | 2.02 | 2.33 | 119,000 | B. |
| February | 1,340 | 1,030 | 1,150 | 1.20 | 1.25 | 63,900 | A. |
| March | 1,470 | 1,030 | 1,170 | 1.23 | 1.42 | 71,900 | A. |
| April | 4,380 | 1,470 | 2,810 | 2.94 | 3.28 | 167,000 | B. |
| May | 4,540 | 1,810 | 2,960 | 3.10 | 3.57 | 182,000 | B. |
| June | 3,540 | 2,300 | 2,850 | 2.98 | 3.32 | 170,000 | B. |
| July | 2,620 | 735 | 1,320 | 1.38 | 1.59 | 81,200 | A. |
| August | 950 | 620 | 762 | .798 | .92 | 46,900 | A. |
| September | 800 | 565 | 642 | .672 | .75 | 38,200 | A. |
| The year | 8,110 | 310 | 1,400 | 1.47 | 19.88 | 1,010,000 | |
| **1909–10.** | | | | | | | |
| October | 735 | 515 | 610 | .639 | .74 | 37,500 | A. |
| November | 2,090 | 565 | 1,010 | 1.06 | 1.17 | 60,100 | A. |
| December | 2,620 | 515 | 1,110 | 1.16 | 1.34 | 68,200 | A. |
| January | 1,510 | 735 | 1,250 | 1.31 | 1.51 | 76,900 | B. |
| February | 1,310 | 735 | 1,180 | 1.24 | 1.29 | 65,500 | B. |
| March | 3,890 | 873 | 1,680 | 1.76 | 2.03 | 103,000 | B. |
| April | 2,810 | 1,060 | 1,980 | 2.07 | 2.31 | 118,000 | A. |
| May | 2,040 | 1,260 | 1,430 | 1.50 | 1.73 | 87,900 | B. |
| June | 1,260 | 703 | 943 | .988 | 1.10 | 56,100 | B. |
| July | 964 | 562 | 755 | .791 | .91 | 46,400 | B. |
| August | 786 | 562 | 668 | .699 | .81 | 41,100 | B. |
| September | 562 | 385 | 498 | .521 | .58 | 29,600 | B. |
| The year | 3,890 | 385 | 1,090 | 1.14 | 15.52 | 790,000 | |
| **1910–11.** | | | | | | | |
| October | 504 | 385 | 427 | .447 | .52 | 26,300 | C. |
| November | 504 | 385 | 418 | .438 | .49 | 24,900 | C. |
| December | 628 | 385 | 473 | .495 | .57 | 29,100 | B. |
| January | 1,480 | 385 | 664 | .695 | .80 | 40,800 | B. |
| February | 1,480 | 873 | 968 | 1.01 | 1.05 | 53,800 | B. |
| March | 2,230 | 786 | 1,200 | 1.26 | 1.45 | 73,800 | B. |
| April | 5,830 | 1,970 | 3,250 | 3.40 | 3.79 | 193,000 | A. |
| May | 5,470 | 2,380 | 3,580 | 3.75 | 4.32 | 220,000 | A. |
| June | 4,960 | 2,380 | 4,170 | 4.37 | 4.88 | 248,000 | A. |
| July | 2,830 | 918 | 2,080 | 2.18 | 2.51 | 128,000 | A. |
| August | 873 | 562 | 673 | .705 | .81 | 41,400 | B. |
| September | 628 | 432 | 545 | .571 | .64 | 32,400 | B. |
| The year | 5,830 | 385 | 1,540 | 1.61 | 21.83 | 1,110,000 | |
| **1911–12.** | | | | | | | |
| October | 498 | 465 | 486 | .509 | .59 | 29,900 | B. |
| November | 570 | 498 | 521 | .546 | .61 | 31,000 | B. |
| December | 730 | 432 | 541 | .566 | .65 | 33,300 | B. |
| January | 910 | 330 | 609 | .638 | .74 | 37,400 | B. |
| February | 432 | 330 | 381 | .399 | .43 | 21,900 | B. |
| March | 570 | 330 | 404 | .423 | .49 | 24,800 | B. |
| April | 645 | 330 | 474 | .496 | .55 | 28,200 | B. |
| May | 2,230 | 645 | 1,310 | 1.37 | 1.58 | 80,600 | B. |
| June | 2,230 | 376 | 1,090 | 1.14 | 1.27 | 64,900 | B. |
| The period | ........ | ........ | ........ | ........ | ........ | 352,000 | |

NOTE.—Values for winter periods may be somewhat in error on account of ice.

## DONNER CREEK AT DONNER LAKE, NEAR TRUCKEE, CAL.

This station is located at the outlet of Donner Lake, in the SW. ¼ NW. ¼ sec. 17, T. 17 N., R. 16 E., about half a mile above the mouth of Cold Creek and 3 miles west of Truckee.

The gage is a vertical staff at the footbridge from which discharge measurements are made. The drainage area above the station is about 13.6 square miles. During the winter season the flow is somewhat affected by ice. Otherwise the results are excellent.

The following records for daily discharge were furnished by the Stone & Webster Engineering Corporation:

*Daily discharge, in second-feet, of Donner Creek at Donner Lake, near Truckee, Cal., for 1909–10.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | |
| 1 | 1 | 113 | 17 | 7 | 7 | 73 | 104 | 65 | 9 | 1 |
| 2 | 1 | 113 | 14 | 7 | 5 | 73 | 104 | 65 | 7 | 1 |
| 3 | 1 | 113 | 14 | 7 | 7 | 73 | 100 | 60 | 7 | 1 |
| 4 | 1 | 113 | 11 | 7 | 9 | 78 | 100 | 60 | 7 | 1 |
| 5 | 1 | 113 | 11 | 7 | 43 | 78 | 100 | 56 | 7 | 1 |
| 6 | 1 | 113 | 11 | 7 | 43 | 78 | 100 | 17 | 7 | 1 |
| 7 | 1 | 113 | 11 | 7 | 43 | 78 | 95 | 17 | 5 | 1 |
| 8 | 1 | 108 | 11 | 7 | 52 | 82 | 95 | 17 | 5 | 1 |
| 9 | 1 | 108 | 11 | 7 | 52 | 82 | 95 | 17 | 5 | 1 |
| 10 | 1 | 104 | 11 | 5 | 56 | 87 | 95 | 17 | 5 | 1 |
| 11 | 2 | 95 | 11 | 5 | 60 | 91 | 100 | 17 | 5 | 1 |
| 12 | 2 | 91 | 11 | 21 | 60 | 95 | 100 | 17 | 5 | 1 |
| 13 | 2 | 91 | 11 | 21 | 60 | 100 | 95 | 14 | 5 | 1 |
| 14 | 2 | 87 | 11 | 21 | 60 | 100 | 95 | 14 | 5 | 1 |
| 15 | 2 | 78 | 11 | 17 | 60 | 100 | 95 | 14 | 4 | 1 |
| 16 | 2 | 60 | 11 | 17 | 60 | 100 | 95 | 14 | 4 | 1 |
| 17 | 2 | 14 | 9 | 17 | 60 | 100 | 87 | 14 | 4 | 1 |
| 18 | 2 | 14 | 9 | 17 | 65 | 104 | 87 | 14 | 4 | 1 |
| 19 | 3 | 14 | 9 | 17 | 65 | 104 | 87 | 11 | 4 | 1 |
| 20 | 4 | 14 | 9 | 14 | 65 | 104 | 82 | 11 | 3 | 1 |
| 21 | 14 | 4 | 9 | 14 | 65 | 104 | 82 | 11 | 3 | 1 |
| 22 | 43 | 4 | 11 | 11 | 65 | 100 | 82 | 11 | 3 | 1 |
| 23 | 56 | 4 | 11 | 11 | 69 | 100 | 78 | 11 | 2 | 1 |
| 24 | 113 | 4 | 11 | 9 | 69 | 100 | 78 | 11 | 2 | 1 |
| 25 | 121 | 7 | 9 | 9 | 69 | 104 | 78 | 11 | 1 | 1 |
| 26 | 113 | 14 | 9 | 7 | 73 | 104 | 78 | 9 | 1 | 1 |
| 27 | 104 | 14 | 9 | 7 | 78 | 104 | 78 | 9 | 1 | 1 |
| 28 | 104 | 14 | 9 | 7 | 82 | 104 | 73 | 9 | 1 | 1 |
| 29 | 104 | 14 | 9 | ........ | 78 | 104 | 73 | 9 | 1 | 1 |
| 30 | 104 | 14 | 9 | ........ | 78 | 104 | 69 | 9 | 1 | 1 |
| 31 | ........ | 17 | 9 | ........ | 73 | ........ | 69 | ........ | 1 | 1 |

*Monthly discharge of Donner Creek at Donner Lake, near Truckee, Cal., for 1909–10.*

[Drainage area, 13.6 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| November | 121 | 1 | 30.3 | 2.23 | 2.49 | 1,800 |
| December | 113 | 4 | 57.4 | 4.22 | 4.86 | 3,530 |
| January | 17 | 9 | 10.6 | .779 | .90 | 652 |
| February | 21 | 5 | 11.1 | .816 | .85 | 616 |
| March | 82 | 5 | 55.8 | 4.10 | 4.73 | 3,430 |
| April | 104 | 73 | 93.6 | 6.88 | 7.68 | 5,570 |
| May | 104 | 69 | 88.7 | 6.52 | 7.52 | 5,450 |
| June | 65 | 9 | 21.0 | 1.54 | 1.72 | 1,250 |
| July | 9 | 1 | 4.0 | .294 | .34 | 246 |
| August | 1 | 1 | 1.0 | .074 | .09 | 61 |
| The period | | | | | | 22,600 |

NOTE.—Monthly values computed by engineers of the United States Geological Survey.

### DONNER CREEK NEAR TRUCKEE, CAL.

This station, which is located 150 feet below the dam of the Donner Creek Ice Co., 1½ miles west ot Truckee, Cal., in NE. ¼ sec. 17, T. 17 N., R. 16 E., and below the mouth of Cold Creek, the principal tributary, was established October 23, 1902, to determine the amount of water available for storage in Donner Lake for use on the Truckee-Carson project.

Four different gages were used during 1909. Previous to June 1, 1909, all gage heights are referred to the datum of the old gage. Beginning June 1, 1909, they refer to a permanent inclined gage installed September 12, 1909, about 40 feet downstream from the old gage.

Discharge measurements are made from a cable and car.

The relation between gage height and discharge is probably not greatly affected by ice, but it is affected by the raising and lowering of the gates of the storage dam at the outlet of Donner Lake.

This station has been maintained in cooperation with the United States Reclamation Service.

The record is considered reliable.

*Discharge measurements of Donner Creek near Truckee, Cal., in 1902–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1902. | | Feet. | Sec.-feet. | 1907. | | Feet. | Sec.-feet. |
| Oct. 22 | E. C. Murphy | 1.80 | 3.25 | May 22 | Nicholas and Porter | 3.90 | 384 |
| | | | | June 28 | E. A. Porter | 3.25 | 218 |
| 1903. | | | | July 26 | .....do | 2.40 | 84 |
| June 21 | G. B. Lorenz | 2.80 | 106 | Aug. 13 | .....do | 2.00 | 30 |
| July 20 | .....do | 1.80 | 11 | | | | |
| 31 | .....do | 1.60 | 5 | 1908. | | | |
| Aug. 31 | .....do | 1.40 | 1 | May 12 | E. A. Porter | 2.70 | 138 |
| | | | | July 7 | M. B. Kennedy | 2.15 | 58 |
| 1904. | | | | Oct. 16 | E. A. Porter | 1.20 | [a]3.4 |
| May 13 | W. A. Wolf | 4.60 | 559 | | | | |
| 26 | .....do | 4.55 | 536 | 1909. | | | |
| June 11 | .....do | 3.80 | 334 | Mar. 2 | E. A. Porter | 2.10 | 52 |
| 17 | A. E. Chandler | 3.53 | 264 | May 19 | L. J. Towne | 2.40 | 314 |
| July 13 | W. A. Wolf | 2.25 | 46 | June 10 | .....do | 2.50 | 350 |
| 23 | .....do | 2.20 | 43 | July 2 | .....do | 1.85 | 166 |
| Aug. 13 | .....do | 1.55 | 11 | 23 | .....do | .90 | 32 |
| 29 | .....do | 1.35 | 4 | | | | |
| Nov. 16 | .....do | 1.60 | 12 | 1910. | | | |
| | | | | Mar. 21 | F. C. Shafer | 1.60 | 228 |
| 1905. | | | | Aug. 26 | .....do | .00 | 4.5 |
| Apr. 15 | W. A. Wolf | 3.06 | 157 | Sept. 20 | T. W. Norcross | .13 | 2.6 |
| May 12 | .....do | 3.01 | 156 | Dec. 14 | D. S. Stuver | .42 | 20 |
| 23 | .....do | 3.42 | 224 | | | | |
| June 26 | .....do | 2.12 | 37 | 1911. | | | |
| July 6 | .....do | 1.74 | 16.0 | Apr. 15 | J. E. Stewart | 1.13 | 133 |
| 27 | .....do | 1.15 | 1.0 | June 5 | .....do | 2.39 | 556 |
| Aug. 2 | .....do | .90 | .2 | Aug. 5 | G. T. Peekema | .08 | 24 |
| Sept. 9 | .....do | 1.00 | .5 | Sept. 26 | F. C. Ebert | −.25 | 4.6 |
| | | | | | | | |
| 1906. | | | | | | | |
| May 31 | M. B. Kennedy | 3.40 | 323 | | | | |
| June 29 | .....do | 3.60 | 330 | | | | |
| Aug. 1 | .....do | 1.65 | 35 | | | | |

[a] Discharge estimated.

NOTE.—Beginning May 19, 1909, gage heights refer to new gage installed Sept. 12, 1909.

*Daily gage height, in feet, of Donner Creek near Truckee, Cal., for 1902–1912.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902–3. | | | | | | | | | | | | |
| 1 | ...... | 1.6 | 1.8 | 2.3 | 2.5 | 2.4 | 3.35 | 3.65 | 4.0 | 2.4 | 1.65 | 1.45 |
| 2 | ...... | 1.6 | 1.8 | 2.35 | 2.5 | 2.4 | 3.3 | 3.75 | 3.8 | 2.4 | 1.65 | 1.45 |
| 3 | ...... | 1.6 | 1.9 | 2.3 | 2.5 | 2.4 | 3.1 | 3.8 | 3.7 | 2.4 | 1.6 | 1.4 |
| 4 | ...... | 1.6 | 1.9 | 2.3 | 2.5 | 2.4 | 3.1 | 4.05 | 3.6 | 2.4 | 1.6 | 1.4 |
| 5 | ...... | 1.6 | 1.9 | 2.3 | 2.5 | 2.4 | 3.15 | 4.0 | 3.5 | 2.4 | 1.55 | 1.4 |
| 6 | ...... | 1.6 | 2.0 | 2.3 | 2.5 | 2.4 | 3.0 | 4.15 | 3.5 | 2.3 | 1.55 | 1.4 |
| 7 | ...... | 1.6 | 1.9 | 2.3 | 2.5 | 2.4 | 3.05 | 4.05 | 3.5 | 2.3 | 1.6 | 1.4 |
| 8 | ...... | 1.6 | 1.9 | 2.3 | 2.5 | 2.4 | 3.1 | 4.05 | 3.4 | 2.3 | 1.6 | 1.4 |
| 9 | ...... | 1.6 | 2.0 | 2.3 | 2.5 | 2.4 | 3.3 | 4.2 | 3.4 | 2.15 | 1.6 | 1.4 |
| 10 | ...... | 2.05 | 2.0 | 2.4 | 2.5 | 2.4 | 3.3 | 4.2 | 3.35 | 2.1 | 1.6 | 1.4 |
| 11 | ...... | 2.05 | 2.0 | 2.4 | 2.4 | 2.4 | 3.2 | 4.15 | 3.35 | 2.1 | 1.5 | 1.4 |
| 12 | ...... | 1.85 | 1.95 | 2.35 | 2.4 | 2.4 | 3.05 | 4.3 | 3.3 | 1.9 | 1.9 | 1.4 |
| 13 | ...... | 1.85 | 1.8 | 2.35 | 2.4 | 2.4 | 3.0 | 4.35 | 3.3 | 1.9 | 1.8 | 1.4 |
| 14 | ...... | 2.2 | 1.9 | 2.3 | 2.4 | 2.4 | 3.1 | 3.95 | 3.1 | 1.9 | 1.8 | 1.4 |
| 15 | ...... | 1.85 | 1.9 | 2.25 | 2.4 | 2.4 | 3.0 | 3.6 | 2.95 | 1.9 | 1.4 | 1.4 |
| 16 | ...... | 2.0 | 1.9 | 2.25 | 2.4 | 2.4 | 2.9 | 4.1 | 3.15 | 1.9 | 1.4 | 1.4 |
| 17 | ...... | 1.9 | 1.95 | 2.2 | 2.4 | 2.4 | 2.9 | 3.95 | 2.9 | 1.9 | 1.4 | 1.4 |
| 18 | ...... | 2.2 | 1.9 | 2.2 | 2.4 | 2.4 | 2.9 | 3.8 | 3.0 | 1.85 | 1.4 | 1.4 |
| 19 | ...... | 1.9 | 1.8 | 2.15 | 2.4 | 2.4 | 2.9 | 3.4 | 2.85 | 1.8 | 1.4 | 1.4 |
| 20 | ...... | 1.8 | 1.8 | 2.2 | 2.4 | 2.4 | 2.9 | 3.35 | 2.9 | 1.8 | 1.3 | 1.4 |
| 21 | ...... | 1.9 | 1.8 | 2.25 | 2.4 | 2.5 | 3.0 | 3.4 | 2.9 | 1.8 | 1.3 | 1.4 |
| 22 | ...... | 1.9 | 1.8 | 2.2 | 2.4 | 2.8 | 3.15 | 3.7 | 2.8 | 1.8 | 1.3 | 1.4 |
| 23 | 1.8 | 1.9 | 1.8 | 2.3 | 2.4 | 2.8 | 3.2 | 3.45 | 2.7 | 1.8 | 1.3 | 1.4 |
| 24 | 1.82 | 1.9 | 1.85 | 2.7 | 2.4 | 2.8 | 3.35 | 3.5 | 2.75 | 1.7 | 1.35 | 1.4 |
| 25 | 1.72 | 1.9 | 1.9 | 2.8 | 2.4 | 2.75 | 3.6 | 3.5 | 2.95 | 1.7 | 1.35 | 1.4 |
| 26 | 1.6 | 1.9 | 1.8 | 2.5 | 2.4 | 2.75 | 3.6 | 3.5 | 2.75 | 1.65 | 1.4 | 1.4 |
| 27 | 1.6 | 1.9 | 1.8 | 2.5 | 2.4 | 2.4 | 3.5 | 3.45 | 2.6 | 1.65 | 1.4 | 1.4 |
| 28 | 1.6 | 1.9 | 1.75 | 2.7 | 2.4 | 3.0 | 3.5 | 3.45 | 2.45 | 1.65 | 1.4 | 1.4 |
| 29 | 1.65 | 1.9 | 1.85 | 2.7 | ....... | 3.0 | 3.6 | 3.65 | 2.45 | 1.65 | 1.4 | 1.4 |
| 30 | 1.7 | 1.8 | 2.25 | 2.6 | ....... | 4.1 | 3.6 | 3.85 | 2.4 | 1.65 | 1.4 | 1.4 |
| 31 | 1.6 | ....... | 2.35 | 2.5 | ....... | 3.55 | ....... | 4.05 | ....... | 1.7 | 1.4 | ..... |
| 1903–4. | | | | | | | | | | | | |
| 1 | 1.4 | 1.45 | 2.45 | 1.6 | 2.0 | 3.3 | 3.65 | 3.35 | 4.2 | 3.15 | 1.8 | 1.35 |
| 2 | 1.4 | 1.45 | 2.45 | 1.6 | 2.0 | 3.85 | 3.6 | 3.3 | 4.4 | 3.05 | 1.7 | 1.35 |
| 3 | 2.1 | 1.45 | 2.45 | 1.8 | 2.0 | 4.3 | 3.6 | 3.35 | 4.35 | 2.85 | 1.7 | 1.3 |
| 4 | 1.65 | 1.48 | 2.4 | 2.05 | 2.0 | 4.8 | 3.5 | 3.4 | 4.35 | 2.75 | 1.7 | 1.3 |
| 5 | 1.45 | 1.5 | 1.9 | 1.85 | 1.9 | 4.35 | 3.5 | 3.55 | 4.25 | 2.7 | 1.7 | 1.3 |
| 6 | 1.4 | 1.4 | 1.75 | 2.0 | 1.9 | 4.1 | 3.5 | 3.75 | 4.3 | 2.7 | 1.7 | 1.3 |
| 7 | 1.4 | 1.58 | 1.9 | 2.0 | 1.9 | 4.2 | 3.5 | 3.95 | 4.3 | 2.7 | 1.7 | 1.3 |
| 8 | 1.4 | 2.1 | 1.9 | 2.0 | 2.0 | 4.4 | 3.55 | 4.15 | 4.25 | 2.55 | 1.6 | 1.3 |
| 9 | 1.45 | 2.1 | 1.9 | 2.0 | 2.0 | 4.05 | 3.6 | 4.3 | 4.15 | 2.45 | 1.6 | 1.3 |
| 10 | 1.5 | 2.0 | 1.9 | 2.0 | 2.0 | 4.0 | 3.6 | 4.4 | 3.9 | 2.4 | 1.55 | 1.3 |
| 11 | 1.5 | 2.0 | 1.8 | 2.0 | 2.0 | 3.85 | 3.8 | 4.35 | 3.9 | 2.45 | 1.55 | 1.3 |
| 12 | 1.45 | 2.9 | 1.8 | 2.0 | 2.0 | 3.75 | 4.0 | 4.5 | 3.75 | 2.3 | 1.55 | 1.3 |
| 13 | 1.45 | 3.2 | 1.8 | 2.0 | 2.0 | 3.65 | 4.25 | 4.6 | 3.7 | 2.2 | 1.5 | 1.55 |
| 14 | 1.46 | 3.1 | 1.8 | 2.0 | 2.0 | 3.6 | 4.25 | 4.65 | 3.7 | 2.1 | 1.5 | 2.6 |
| 15 | 1.5 | 2.9 | 1.8 | 2.0 | 2.15 | 3.5 | 4.25 | 4.65 | 3.7 | 2.1 | 1.45 | 2.55 |
| 16 | 1.5 | 2.7 | 1.8 | 2.05 | 2.8 | 3.5 | 4.05 | 4.75 | 3.6 | 1.7 | 1.45 | 2.5 |
| 17 | 1.5 | 2.75 | 1.8 | 2.0 | 2.75 | 3.45 | 3.95 | 4.75 | 3.5 | 1.6 | 1.45 | 2.4 |
| 18 | 1.5 | 2.9 | 1.7 | 2.0 | 2.5 | 4.1 | 4.0 | 4.55 | 3.5 | 2.15 | 1.5 | 2.3 |
| 19 | 1.5 | 2.8 | 1.7 | 2.5 | 2.5 | 4.45 | 4.0 | 4.35 | 3.5 | 2.25 | 1.5 | 2.25 |
| 20 | 1.5 | 3.0 | 1.7 | 2.5 | 2.4 | 4.05 | 3.9 | 4.3 | 3.55 | 2.2 | 1.45 | 2.2 |
| 21 | 1.45 | 3.9 | 1.7 | 2.0 | 2.55 | 4.05 | 3.8 | 4.65 | 3.55 | 2.1 | 1.4 | 2.15 |
| 22 | 1.45 | 3.55 | 1.7 | 2.0 | 4.3 | 4.6 | 3.65 | 5.1 | 3.6 | 2.1 | 1.4 | 2.1 |
| 23 | 1.45 | 3.45 | 1.7 | 2.0 | 4.9 | 4.45 | 3.6 | 5.1 | 3.5 | 2.1 | 1.4 | 2.1 |
| 24 | 1.45 | 3.25 | 1.7 | 2.0 | 5.05 | 4.2 | 3.5 | 4.7 | 3.35 | 2.1 | 1.4 | 2.3 |
| 25 | 1.52 | 3.05 | 1.7 | 2.0 | 3.95 | 4.05 | 3.5 | 4.75 | 3.3 | 2.1 | 1.45 | 2.3 |
| 26 | 1.45 | 3.0 | 1.7 | 2.0 | 3.7 | 3.9 | 3.45 | 4.55 | 3.3 | 2.1 | 1.45 | 2.3 |
| 27 | 1.45 | 2.9 | 1.7 | 2.0 | 3.6 | 3.9 | 3.4 | 4.5 | 3.3 | 2.0 | 1.45 | 2.35 |
| 28 | 1.45 | 2.85 | 1.7 | 2.0 | 3.5 | 4.2 | 3.4 | 4.6 | 3.3 | 1.95 | 1.4 | 2.05 |
| 29 | 1.45 | 2.25 | 1.7 | 2.0 | 3.4 | 4.05 | 3.4 | 4.55 | 3.3 | 1.9 | 1.4 | 2.0 |
| 30 | 1.45 | 2.7 | 1.7 | 2.0 | ....... | 3.9 | 3.4 | 4.5 | 3.2 | 1.9 | 1.4 | 2.0 |
| 31 | 1.45 | ....... | 1.7 | 2.0 | ....... | 3.8 | ....... | 4.35 | ....... | 1.9 | 1.35 | ..... |
| 1904–5. | | | | | | | | | | | | |
| 1 | 2.25 | 1.9 | 1.7 | 1.9 | 1.7 | 3.0 | 2.7 | 3.6 | 3.3 | 1.9 | 1.1 | 1.0 |
| 2 | 2.0 | 1.9 | 1.7 | 1.9 | 1.8 | 3.0 | 2.6 | 3.5 | 3.2 | 1.9 | .95 | 2.25 |
| 3 | 1.85 | 1.9 | 1.7 | 1.9 | 1.8 | 3.0 | 2.6 | 3.45 | 3.15 | 1.9 | .9 | 2.2 |
| 4 | 1.8 | 1.9 | 1.7 | 1.7 | 1.8 | 3.0 | 2.65 | 3.4 | 3.05 | 1.85 | .9 | 1.1 |
| 5 | 1.8 | 1.6 | 1.4 | 1.7 | 1.8 | 3.05 | 2.75 | 3.35 | 3.0 | 1.8 | 1.0 | 1.2 |

*Daily gage height, in feet, of Donner Creek near Truckee, Cal., for 1902-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908-9. | | | | | | | | | | | | |
| 16 | 1.2 | 1.2 | 1.3 | 5.0 | 2.0 | 2.0 | 2.95 | 3.1 | 2.0 | 1.15 | 0.6 | 0.4 |
| 17 | 1.15 | 1.2 | 1.3 | 4.95 | 2.0 | 2.05 | 3.05 | 3.1 | 1.9 | 1.0 | .6 | .4 |
| 18 | 1.1 | 1.2 | 1.35 | 4.95 | 2.0 | 2.15 | 3.2 | 3.1 | 1.8 | 1.0 | .6 | .4 |
| 19 | 1.1 | 1.2 | 1.8 | 4.8 | 1.9 | 2.2 | 3.2 | 3.15 | 1.4 | .95 | .6 | .4 |
| 20 | 1.1 | 1.2 | 1.7 | 4.5 | 1.9 | 2.2 | 3.0 | 3.2 | 1.4 | .9 | .6 | .4 |
| 21 | 1.1 | 1.3 | 1.7 | 4.4 | 1.9 | 2.2 | 3.0 | 3.2 | 1.4 | .9 | .6 | .4 |
| 22 | 1.1 | 1.5 | 1.7 | 3.9 | 1.95 | 2.2 | 2.95 | 3.1 | 1.5 | .9 | .6 | .4 |
| 23 | 1.1 | 1.6 | 1.7 | 3.45 | 1.9 | 2.15 | 3.0 | 3.05 | 1.55 | .9 | .6 | .4 |
| 24 | 1.1 | 1.6 | 1.7 | 2.0 | 2.0 | 2.1 | 3.0 | 3.05 | 1.45 | .85 | .6 | .4 |
| 25 | 1.1 | 1.5 | 1.7 | 2.0 | 2.0 | 2.1 | 3.0 | 3.05 | 1.4 | .8 | .6 | .4 |
| 26 | 1.1 | 1.3 | 1.7 | 2.0 | 2.0 | 2.1 | 3.1 | 3.2 | 1.35 | .8 | .6 | .4 |
| 27 | 1.1 | 1.3 | 1.7 | 2.0 | 2.0 | 2.1 | 3.2 | 3.35 | 1.3 | .8 | .6 | .4 |
| 28 | 1.1 | 1.3 | 1.7 | 2.0 | 2.0 | 2.1 | 3.35 | 3.25 | 1.25 | .8 | .6 | .3 |
| 29 | 1.1 | 1.3 | 1.7 | 2.0 | ...... | 2.05 | 3.3 | 3.1 | 1.2 | .8 | .6 | .2 |
| 30 | 1.1 | 1.3 | 1.45 | 1.9 | ...... | 2.0 | 3.4 | 3.15 | 1.15 | .8 | .5 | .2 |
| 31 | 1.1 | ...... | 1.4 | 1.9 | ...... | 2.0 | ...... | 3.35 | ...... | .8 | .5 | ...... |
| 1909-10. | | | | | | | | | | | | |
| 1 | .2 | .4 | 3.25 | .9 | .85 | .85 | 1.3 | 1.8 | 1.3 | .4 | .1 | .0 |
| 2 | .3 | .4 | 2.7 | .9 | .85 | .85 | 1.3 | 1.6 | 1.3 | .4 | .1 | .0 |
| 3 | .4 | .4 | 2.2 | .8 | .85 | .9 | 1.3 | 1.5 | 1.2 | .4 | .1 | .0 |
| 4 | .4 | .4 | 2.2 | .8 | .85 | 1.05 | 1.3 | 1.45 | 1.1 | .4 | .0 | .0 |
| 5 | .5 | .4 | 1.9 | .8 | .85 | 1.0 | 1.35 | 1.4 | 1.05 | .4 | .1 | .0 |
| 6 | .5 | .4 | 1.9 | .8 | .85 | 1.05 | 1.4 | 1.4 | .85 | .4 | .0 | .0 |
| 7 | .5 | .4 | 1.85 | .7 | .85 | 1.1 | 1.4 | 1.5 | .85 | .4 | .0 | .0 |
| 8 | .5 | .4 | 1.8 | .8 | .85 | 1.1 | 1.4 | 1.5 | .8 | .3 | .0 | .0 |
| 9 | .5 | .4 | 1.75 | .8 | .85 | 1.1 | 1.55 | 1.5 | .8 | .3 | .0 | .0 |
| 10 | .4 | .4 | 1.7 | .8 | 1.0 | 1.15 | 1.6 | 1.6 | .8 | .3 | .0 | .0 |
| 11 | .4 | .4 | 1.55 | .8 | 1.0 | 1.2 | 1.6 | 1.7 | .8 | .3 | .0 | .0 |
| 12 | .4 | .4 | 1.5 | .8 | 1.4 | 1.25 | 1.5 | 1.7 | .75 | .3 | .05 | .0 |
| 13 | .4 | .4 | 1.5 | .8 | 1.15 | 1.3 | 1.6 | 1.7 | .75 | .3 | .05 | .0 |
| 14 | .35 | .4 | 1.45 | .8 | 1.0 | 1.3 | 1.6 | 1.7 | .7 | .3 | .0 | .0 |
| 15 | .3 | .4 | 1.4 | .8 | .95 | 1.3 | 1.6 | 1.5 | .7 | .2 | .0 | .1 |
| 16 | .3 | .4 | 1.3 | .8 | .9 | 1.3 | 1.65 | 1.5 | .7 | .2 | .0 | .1 |
| 17 | .3 | .4 | 1.25 | .8 | .85 | 1.3 | 1.7 | 1.5 | .7 | .2 | .0 | .1 |
| 18 | .3 | .4 | 1.2 | .8 | .85 | 1.35 | 1.7 | 1.55 | .7 | .15 | .0 | .1 |
| 19 | .3 | 1.5 | 1.0 | .8 | .85 | 1.7 | 1.7 | 1.6 | .7 | .2 | .0 | .1 |
| 20 | .3 | 2.1 | 1.0 | .8 | .8 | 1.75 | 1.8 | 1.6 | .7 | .15 | .0 | .1 |
| 21 | .3 | 2.2 | 1.0 | .9 | .8 | 1.65 | 1.7 | 1.5 | .65 | .2 | .0 | .1 |
| 22 | .3 | 2.4 | .85 | 1.1 | .8 | 1.6 | 1.9 | 1.5 | .6 | .15 | .0 | .1 |
| 23 | .3 | 2.5 | .7 | 1.1 | .8 | 1.5 | 1.9 | 1.55 | .55 | .2 | .0 | .1 |
| 24 | .3 | 2.3 | .7 | 1.05 | .75 | 1.4 | 1.9 | 1.55 | .5 | .1 | .0 | .1 |
| 25 | .3 | 2.2 | .7 | 1.0 | .75 | 1.35 | 2.0 | 1.5 | .5 | .1 | .0 | .1 |
| 26 | .3 | 2.0 | .7 | .9 | .75 | 1.3 | 2.0 | 1.45 | .5 | .1 | .0 | .1 |
| 27 | .3 | 1.8 | .7 | .9 | .75 | 1.3 | 2.0 | 1.4 | .5 | .1 | .0 | .1 |
| 28 | .3 | 1.8 | .7 | .9 | .8 | 1.3 | 2.0 | 1.4 | .5 | .1 | .0 | .1 |
| 29 | .4 | 1.9 | .7 | .9 | ...... | 1.2 | 2.0 | 1.4 | .4 | .5 | .0 | .1 |
| 30 | .4 | 2.7 | .7 | .9 | ...... | 1.2 | 1.9 | 1.4 | .4 | .45 | .0 | .1 |
| 31 | .4 | ...... | .8 | .9 | ...... | 1.25 | ...... | 1.4 | ...... | .1 | .0 | ...... |
| 1910-11. | | | | | | | | | | | | |
| 1 | .1 | .05 | .4 | .4 | 1.6 | .6 | 1.35 | 1.8 | 2.1 | 1.45 | .15 | −.2 |
| 2 | .1 | .0 | .3 | .4 | 1.5 | .5 | 1.45 | 1.8 | 2.2 | 1.45 | .1 | −.2 |
| 3 | .1 | .0 | .3 | .4 | 1.4 | .5 | 1.45 | 1.9 | 2.35 | 1.5 | .1 | −.2 |
| 4 | .1 | .0 | .3 | .3 | 1.3 | .5 | 1.45 | 2.0 | 2.45 | 1.45 | .1 | −.2 |
| 5 | .1 | .0 | .3 | .3 | 1.3 | .5 | 1.5 | 1.95 | 2.5 | 1.4 | .1 | −.2 |
| 6 | .1 | .0 | .3 | .3 | 1.3 | .5 | 1.5 | 1.8 | 2.45 | 1.35 | .1 | −.2 |
| 7 | .1 | .0 | .4 | .4 | 1.2 | .5 | 1.5 | 1.9 | 2.45 | 1.3 | .1 | −.2 |
| 8 | .1 | .0 | .4 | .4 | 1.2 | .5 | 1.5 | 1.9 | 2.45 | 1.25 | .0 | −.2 |
| 9 | .1 | .3 | .5 | .4 | 1.0 | .5 | 1.5 | 1.9 | 2.4 | 1.2 | .0 | −.2 |
| 10 | .1 | .2 | .7 | .5 | 1.0 | .55 | 1.4 | 1.8 | 2.45 | 1.1 | .0 | −.2 |
| 11 | .1 | .2 | .7 | .6 | .9 | .6 | 1.3 | 1.85 | 2.45 | 1.1 | .0 | −.2 |
| 12 | .1 | .1 | .6 | .6 | .9 | .6 | 1.3 | 1.9 | 2.5 | 1.0 | .0 | −.2 |
| 13 | .1 | .0 | .55 | .6 | .9 | .55 | 1.2 | 1.9 | 2.5 | 1.0 | .0 | −.2 |
| 14 | .1 | .0 | .45 | .6 | 1.0 | .55 | 1.15 | 1.9 | 2.4 | 1.0 | .0 | −.2 |
| 15 | .1 | .1 | .4 | .6 | 1.0 | .6 | 1.1 | 1.8 | 2.4 | 1.0 | .0 | −.2 |
| 16 | .1 | .1 | .4 | .6 | 1.0 | .6 | 1.1 | 1.8 | 2.35 | .95 | −.1 | −.2 |
| 17 | .1 | .1 | .4 | .7 | 1.0 | .6 | 1.15 | 1.8 | 2.4 | .9 | −.1 | −.08 |
| 18 | .1 | .15 | .4 | .7 | 1.1 | .6 | 1.25 | 1.8 | 2.4 | .85 | −.1 | −.04 |
| 19 | .1 | .2 | .4 | .7 | 1.1 | .6 | 1.3 | 1.7 | 2.3 | .8 | −.1 | −.07 |
| 20 | .1 | .2 | .4 | .7 | 1.1 | .6 | 1.2 | 1.75 | 2.25 | .75 | −.1 | −.2 |

*Daily gage height, in feet, of Donner Creek near Truckee, Cal., for 1902–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1910–11.** | | | | | | | | | | | | |
| 21 | 0.1 | 0.2 | 0.4 | 0.7 | 1.0 | 0.6 | 1.3 | 1.8 | 2.2 | 0.7 | −0.1 | −0.2 |
| 22 | .1 | .2 | .4 | .7 | .95 | .7 | 1.45 | 2.0 | 2.0 | .65 | − .15 | − .2 |
| 23 | .1 | .2 | .4 | .7 | .8 | .7 | 1.65 | 2.25 | 1.85 | .6 | − .15 | − .2 |
| 24 | .1 | .5 | .4 | .8 | .7 | .7 | 1.75 | 2.25 | 1.75 | .55 | − .15 | − .2 |
| 25 | .1 | .45 | .4 | .8 | .6 | .85 | 1.85 | 2.1 | 1.65 | .5 | − .2 | − .25 |
| 26 | .1 | .4 | .4 | .8 | .6 | .9 | 2.0 | 2.0 | 1.7 | .45 | − .2 | − .25 |
| 27 | .1 | .4 | .4 | .9 | .6 | .9 | 1.9 | 2.0 | 1.8 | .4 | − .2 | − .25 |
| 28 | .1 | .5 | .4 | .9 | .55 | 1.05 | 1.8 | 2.05 | 1.7 | .3 | − .2 | − .25 |
| 29 | .1 | .4 | .4 | 1.6 | ....... | 1.1 | 1.75 | 2.1 | 1.65 | .2 | − .2 | − .25 |
| 30 | .1 | .4 | .4 | 1.6 | ....... | 1.1 | 1.8 | 2.1 | 1.55 | .2 | − .2 | − .25 |
| 31 | .1 | ....... | .4 | 1.6 | ....... | 1.2 | ....... | 2.1 | ....... | .2 | − .2 | ...... |

| Day. | Oct. | Nov. | Dec | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| **1911–12.** | | | | | | | | | |
| 1 | −0.25 | − 0.2 | 0.0 | 0.7 | − 0.1 | − 0.1 | 0.2 | 0.4 | 1.5 |
| 2 | − .25 | − .2 | − .1 | 1.0 | .0 | − .1 | .2 | .5 | 1.7 |
| 3 | − .25 | − .2 | − .0 | .8 | .0 | − .1 | .2 | .5 | 1.7 |
| 4 | − .25 | − .2 | − .1 | .8 | .0 | − .1 | .2 | .5 | 1.7 |
| 5 | − .25 | − .2 | − .1 | .9 | .0 | − .1 | .2 | .5 | 1.5 |
| 6 | − .25 | − .2 | − .1 | .9 | .0 | − .1 | .2 | .5 | 1.5 |
| 7 | − .25 | − .2 | − .1 | .0 | .0 | − .1 | .2 | .7 | 1.5 |
| 8 | − .25 | − .4 | − .1 | − .1 | .0 | − .1 | .2 | .7 | 1.2 |
| 9 | − .25 | − .3 | − .1 | .0 | − .1 | − .1 | .2 | 1.0 | 1.0 |
| 10 | − .25 | − .2 | .0 | − .1 | − .1 | − .1 | .2 | 1.2 | 1.0 |
| 11 | − .25 | − .2 | .0 | − .1 | − .1 | − .1 | .2 | 1.2 | 1.0 |
| 12 | − .25 | − .2 | .0 | .0 | − .1 | − .1 | .2 | 1.3 | 1.0 |
| 13 | − .2 | − .2 | .0 | − .1 | − .1 | − .1 | .2 | 1.6 | 1.0 |
| 14 | − .2 | − .2 | .0 | − .1 | − .1 | − .1 | .2 | 1.6 | 1.0 |
| 15 | − .2 | − .2 | .0 | − .1 | − .1 | − .1 | .2 | 1.6 | 1.0 |
| 16 | − .2 | − .2 | .0 | − .1 | − .1 | − .1 | .2 | 1.6 | 1.0 |
| 17 | − .2 | − .2 | .0 | − .1 | − .1 | − .2 | .2 | 1.5 | 1.0 |
| 18 | − .2 | − .1 | − .1 | − .1 | − .1 | − .2 | .2 | 1.5 | 1.0 |
| 19 | − .2 | − .1 | − .2 | − .1 | − .1 | − .2 | .2 | 1.5 | .8 |
| 20 | − .2 | .0 | − .2 | − .1 | − .1 | − .2 | .2 | 1.5 | .7 |
| 21 | − .2 | .0 | − .3 | − .1 | − .1 | − .2 | .2 | 1.4 | .6 |
| 22 | − .2 | .0 | − .2 | − .1 | − .1 | − .2 | .2 | 1.1 | .6 |
| 23 | − .2 | .0 | − .2 | − .1 | − .1 | − .2 | .2 | .75 | .5 |
| 24 | − .2 | .0 | − .2 | − .1 | − .1 | − .2 | .2 | .6 | .4 |
| 25 | − .2 | .0 | − .3 | − .05 | − .1 | − .2 | .2 | .7 | .4 |
| 26 | − .2 | .0 | − .2 | .65 | − .1 | − .2 | .2 | .7 | .3 |
| 27 | − .2 | .0 | − .2 | .8 | − .1 | − .2 | .2 | 1.0 | .3 |
| 28 | − .2 | .0 | − .2 | .7 | − .1 | − .2 | .2 | 1.0 | .3 |
| 29 | − .2 | .0 | − .2 | .6 | − .1 | − .2 | .2 | 1.0 | .3 |
| 30 | − .2 | .0 | − .3 | .4 | ....... | − .2 | .2 | 1.5 | .2 |
| 31 | − .2 | ....... | − .2 | .0 | ....... | − .2 | ....... | 1.5 | ....... |

NOTE.—Practically no flow Oct. 19-24, 1906, as ice ponds were being filled. Gage heights after June 1, 1909, refer to a new gage at a different datum.

## *Rating tables for Donner Creek near Truckee, Cal.*

**October 23, 1902, to December 31, 1903.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.3 | 1 | 2.1 | 28 | 2.9 | 120 | 3.7 | 248 |
| 1.4 | 1 | 2.2 | 36 | 3.0 | 136 | 3.8 | 264 |
| 1.5 | 3 | 2.3 | 46 | 3.1 | 152 | 3.9 | 280 |
| 1.6 | 5 | 2.4 | 56 | 3.2 | 168 | 4.0 | 296 |
| 1.7 | 7 | 2.5 | 67 | 3.3 | 184 | 4.1 | 312 |
| 1.8 | 11 | 2.6 | 79 | 3.4 | 200 | 4.2 | 328 |
| 1.9 | 16 | 2.7 | 92 | 3.5 | 216 | 4.3 | 344 |
| 2.0 | 22 | 2.8 | 106 | 3.6 | 232 | 4.4 | 360 |

NOTE.—Table not well defined.

*Rating tables for Donner Creek near Truckee, Cal.*—Continued.

**January 1 to December 31, 1904.**

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 1.40 | 5.5 | 1.95 | 25 | 3.00 | 156 | 4.10 | 411 |
| 1.45 | 6.5 | 2.00 | 28 | 3.10 | 176 | 4.20 | 438 |
| 1.50 | 8 | 2.10 | 35 | 3.20 | 196 | 4.30 | 466 |
| 1.55 | 9.5 | 2.20 | 43 | 3.30 | 216 | 4.40 | 494 |
| 1.60 | 11 | 2.30 | 52 | 3.40 | 238 | 4.50 | 523 |
| 1.65 | 12.5 | 2.40 | 63 | 3.50 | 260 | 4.60 | 553 |
| 1.70 | 14 | 2.50 | 76 | 3.60 | 284 | 4.70 | 583 |
| 1.75 | 16 | 2.60 | 90 | 3.70 | 308 | 4.80 | 613 |
| 1.80 | 18 | 2.70 | 105 | 3.80 | 333 | 4.90 | 645 |
| 1.85 | 20 | 2.80 | 121 | 3.90 | 359 | 5.00 | 677 |
| 1.90 | 22 | 2.90 | 138 | 4.00 | 385 | 5.10 | 709 |

NOTE.—Table is applicable only to open channel. It is based upon 9 discharge measurements made during 1904 and is well defined between gage heights 1.35 feet and 4.60 feet.

**January 1, 1905, to April 30, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.70 | 0.0 | 1.50 | 8.3 | 2.30 | 52 | 3.10 | 166 |
| .80 | .1 | 1.60 | 11.5 | 2.40 | 62 | 3.20 | 185 |
| .90 | .2 | 1.70 | 15 | 2.50 | 73 | 3.30 | 206 |
| 1.00 | .5 | 1.80 | 19 | 2.60 | 86 | 3.40 | 227 |
| 1.10 | 1.1 | 1.90 | 24 | 2.70 | 100 | 3.50 | 248 |
| 1.20 | 2.0 | 2.00 | 29 | 2.80 | 115 | 3.60 | 269 |
| 1.30 | 3.5 | 2.10 | 35 | 2.90 | 131 | 3.70 | 290 |
| 1.40 | 5.7 | 2.20 | 43 | 3.00 | 148 | | |

NOTE.—Table is applicable only to open channel. It is based on discharge measurements made during 1904-5, and is well defined.

**May 1, 1906, to March 17, 1907.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.20 | 15 | 1.80 | 45 | 2.40 | 111 | 3.00 | 217 |
| 1.30 | 19 | 1.90 | 53 | 2.50 | 126 | 3.10 | 239 |
| 1.40 | 23 | 2.00 | 62 | 2.60 | 142 | 3.20 | 261 |
| 1.50 | 27 | 2.10 | 72 | 2.70 | 159 | 3.30 | 284 |
| 1.60 | 32 | 2.20 | 84 | 2.80 | 177 | | |
| 1.70 | 38 | 2.30 | 97 | 2.90 | 196 | | |

NOTE.—Table applicable only to open channel. It is based on 3 discharge measurements made during 1906 and the form of the previous curve and is not well defined.

**March 18 to December 31, 1907.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.20 | 5 | 2.30 | 64 | 3.40 | 252 | 4.50 | 588 |
| 1.30 | 7 | 2.40 | 76 | 3.50 | 276 | 4.60 | 626 |
| 1.40 | 9 | 2.50 | 90 | 3.60 | 302 | 4.70 | 664 |
| 1.50 | 11 | 2.60 | 104 | 3.70 | 328 | 4.80 | 702 |
| 1.60 | 14 | 2.70 | 118 | 3.80 | 356 | 4.90 | 740 |
| 1.70 | 18 | 2.80 | 134 | 3.90 | 384 | 5.00 | 780 |
| 1.80 | 22 | 2.90 | 150 | 4.00 | 414 | 5.20 | 860 |
| 1.90 | 28 | 3.00 | 168 | 4.10 | 444 | 5.40 | 940 |
| 2.00 | 34 | 3.10 | 186 | 4.20 | 478 | 5.60 | 1,020 |
| 2.10 | 42 | 3.20 | 206 | 4.30 | 512 | | |
| 2.20 | 52 | 3.30 | 228 | 4.40 | 550 | | |

NOTE.—Table applicable only to open channel. It is based on 4 discharge measurements made during 1907 and is not well defined.

**January 1 to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.10 | 2 | 1.70 | 26 | 2.30 | 75 | 2.90 | 157 |
| 1.20 | 4 | 1.80 | 32 | 2.40 | 86 | 3.00 | 175 |
| 1.30 | 7 | 1.90 | 39 | 2.50 | 98 | 3.10 | 194 |
| 1.40 | 11 | 2.00 | 47 | 2.60 | 111 | 3.20 | 214 |
| 1.50 | 15 | 2.10 | 56 | 2.70 | 126 | 3.30 | 235 |
| 1.60 | 20 | 2.20 | 65 | 2.80 | 141 | | |

NOTE.—Table applicable only to open channel. It is based on 6 discharge measurements made during 1907-8 and is fairly well defined between gage heights 1.2 feet and 4.0 feet.

*Daily discharge, in second-feet, of Donner Creek near Truckee, Cal., for 1909-1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 8 | 34 | 43 | 52 | 276 | 255 | 180 | 20 | 7 |
| 2 | 12 | 34 | 52 | 37 | 276 | 255 | 160 | 16 | 7 |
| 3 | 10 | 34 | 52 | 68 | 300 | 255 | 160 | 16 | 7 |
| 4 | 10 | 34 | 52 | 73 | 313 | 285 | 150 | 16 | 7 |
| 5 | 68 | 34 | 52 | 73 | 340 | 285 | 131 | 14 | 7 |
| 6 | 86 | 34 | 52 | 73 | 354 | 242 | 76 | 11 | 7 |
| 7 | 34 | 34 | 52 | 73 | 368 | 242 | 90 | 14 | 7 |
| 8 | 34 | 30 | 52 | 73 | 382 | 230 | 106 | 14 | 7 |
| 9 | 27 | 34 | 52 | 92 | 410 | 230 | 98 | 11 | 7 |
| 10 | 27 | 34 | 52 | 99 | 368 | 242 | 90 | 11 | 7 |
| 11 | 27 | 43 | 52 | 99 | 313 | 242 | 90 | 11 | 7 |
| 12 | 52 | 43 | 43 | 113 | 276 | 242 | 90 | 11 | 7 |
| 13 | 73 | 43 | 43 | 113 | 242 | 242 | 90 | 11 | 4 |
| 14 | 326 | 43 | 43 | 128 | 207 | 242 | 76 | 11 | 4 |
| 15 | 652 | 43 | 43 | 154 | 230 | 218 | 70 | 11 | 4 |
| 16 | 812 | 43 | 43 | 174 | 207 | 205 | 58 | 11 | 4 |
| 17 | 752 | 43 | 48 | 196 | 207 | 180 | 41 | 11 | 4 |
| 18 | 752 | 43 | 57 | 230 | 207 | 160 | 41 | 11 | 4 |
| 19 | 652 | 34 | 62 | 230 | 218 | 90 | 36 | 11 | 4 |
| 20 | 612 | 34 | 62 | 185 | 230 | 90 | 31 | 11 | 4 |
| 21 | 574 | 34 | 62 | 185 | 230 | 90 | 31 | 11 | 4 |
| 22 | 410 | 38 | 62 | 175 | 207 | 106 | 31 | 11 | 4 |
| 23 | 288 | 34 | 57 | 185 | 196 | 114 | 31 | 11 | 4 |
| 24 | 43 | 43 | 52 | 185 | 196 | 98 | 27 | 11 | 4 |
| 25 | 43 | 43 | 52 | 185 | 196 | 90 | 23 | 11 | 4 |
| 26 | 43 | 43 | 52 | 207 | 230 | 83 | 23 | 11 | 4 |
| 27 | 43 | 43 | 52 | 230 | 264 | 76 | 23 | 11 | 4 |
| 28 | 43 | 43 | 52 | 264 | 242 | 70 | 23 | 11 | 2 |
| 29 | 43 | ....... | 48 | 253 | 207 | 63 | 23 | 11 | 1 |
| 30 | 34 | ....... | 43 | 276 | 218 | 58 | 23 | 7 | 1 |
| 31 | 34 | ....... | 43 | ....... | 264 | ....... | 23 | 7 | ....... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | 1 | 4 | 862 | 77 | 70 | 70 | 153 | 290 | 153 | 18 | 2.5 | 1.2 |
| 2 | 2 | 4 | 674 | 77 | 70 | 70 | 153 | 228 | 153 | 18 | 2.5 | 1.2 |
| 3 | 4 | 4 | 447 | 63 | 70 | 77 | 153 | 202 | 131 | 18 | 2.5 | 1.2 |
| 4 | 4 | 4 | 447 | 63 | 70 | 102 | 153 | 190 | 111 | 18 | 1.2 | 1.2 |
| 5 | 7 | 4 | 326 | 63 | 70 | 93 | 165 | 177 | 102 | 18 | 2.5 | 1.2 |
| 6 | 7 | 4 | 326 | 63 | 70 | 102 | 177 | 177 | 70 | 18 | 1.2 | 1.2 |
| 7 | 7 | 4 | 308 | 50 | 70 | 111 | 177 | 202 | 70 | 18 | 1.2 | 1.2 |
| 8 | 7 | 4 | 290 | 63 | 70 | 111 | 177 | 202 | 63 | 11 | 1.2 | 1.2 |
| 9 | 7 | 4 | 274 | 63 | 70 | 111 | 215 | 202 | 63 | 11 | 1.2 | 1.2 |
| 10 | 4 | 4 | 257 | 63 | 93 | 121 | 228 | 228 | 63 | 11 | 1.2 | 1.2 |
| 11 | 4 | 4 | 215 | 63 | 93 | 131 | 228 | 257 | 63 | 11 | 1.2 | 1.2 |
| 12 | 4 | 4 | 202 | 63 | 177 | 142 | 202 | 257 | 56 | 11 | 1.8 | 1.2 |
| 13 | 4 | 4 | 202 | 63 | 121 | 153 | 228 | 257 | 56 | 11 | 1.8 | 1.2 |
| 14 | 3 | 4 | 190 | 63 | 93 | 153 | 228 | 257 | 50 | 11 | 1.2 | 1.2 |
| 15 | 2 | 4 | 177 | 63 | 85 | 153 | 228 | 202 | 50 | 5.5 | 1.2 | 2.5 |
| 16 | 2 | 4 | 153 | 63 | 77 | 153 | 242 | 202 | 50 | 5.5 | 1.2 | 2.5 |
| 17 | 2 | 4 | 142 | 63 | 70 | 153 | 257 | 202 | 50 | 5.5 | 1.2 | 2.5 |
| 18 | 2 | 4 | 131 | 63 | 70 | 165 | 257 | 215 | 50 | 4.0 | 1.2 | 2.5 |
| 19 | 2 | 106 | 93 | 63 | 70 | 257 | 257 | 228 | 50 | 5.5 | 1.2 | 2.5 |
| 20 | 2 | 230 | 93 | 63 | 63 | 274 | 290 | 228 | 50 | 4.0 | 1.2 | 2.5 |
| 21 | 2 | 255 | 93 | 77 | 63 | 242 | 257 | 202 | 44 | 5.5 | 1.2 | 2.5 |
| 22 | 2 | 315 | 70 | 111 | 63 | 228 | 326 | 202 | 38 | 4.0 | 1.2 | 2.5 |
| 23 | 2 | 345 | 50 | 111 | 63 | 202 | 326 | 215 | 32 | 5.5 | 1.2 | 2.5 |
| 24 | 2 | 489 | 50 | 102 | 56 | 177 | 326 | 215 | 27 | 2.5 | 1.2 | 2.5 |
| 25 | 2 | 447 | 50 | 93 | 56 | 165 | 365 | 202 | 27 | 2.5 | 1.2 | 2.5 |
| 26 | 2 | 365 | 50 | 77 | 56 | 153 | 365 | 190 | 27 | 2.5 | 1.2 | 2.5 |
| 27 | 2 | 290 | 50 | 77 | 56 | 153 | 365 | 177 | 27 | 2.5 | 1.2 | 2.5 |
| 28 | 2 | 290 | 50 | 77 | 63 | 153 | 365 | 177 | 27 | 2.5 | 1.2 | 2.5 |
| 29 | 4 | 326 | 50 | 77 | ....... | 131 | 365 | 177 | 18 | 27 | 1.2 | 2.5 |
| 30 | 4 | 674 | 50 | 77 | ....... | 131 | 326 | 177 | 18 | 22 | 1.2 | 2.5 |
| 31 | 4 | ....... | 63 | 77 | ....... | 142 | ....... | 177 | ....... | 2.5 | 1.2 | ....... |

*Daily discharge, in second-feet, of Donner Creek near Truckee, Cal., for 1909–1912*—Con

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 1 | 2.5 | 1.8 | 18 | 18 | 242 | 88 | 174 | 306 | 422 | 232 | 30 | |
| 2 | 2.5 | 1.2 | 11 | 18 | 212 | 27 | 200 | 306 | 466 | 232 | 26 | |
| 3 | 2.5 | 1.2 | 11 | 18 | 187 | 27 | 200 | 342 | 538 | 245 | 26 | |
| 4 | 2.5 | 1.2 | 11 | 11 | 162 | 27 | 200 | 380 | 587 | 232 | 26 | |
| 5 | 2.5 | 1.2 | 11 | 11 | 162 | 27 | 212 | 361 | 612 | 220 | 26 | |
| 6 | 2.5 | 1.2 | 11 | 11 | 162 | 27 | 212 | 306 | 587 | 208 | 26 | |
| 7 | 2.5 | 1.2 | 18 | 18 | 140 | 27 | 212 | 342 | 587 | 197 | 26 | |
| 8 | 2.5 | 1.2 | 18 | 18 | 140 | 27 | 212 | 342 | 587 | 186 | 18 | |
| 9 | 2.5 | 11 | 27 | 18 | 100 | 27 | 212 | 342 | 562 | 175 | 18 | |
| 10 | 2.5 | 5.5 | 50 | 27 | 100 | 32 | 187 | 306 | 587 | 155 | 18 | |
| 11 | 2.5 | 5.5 | 50 | 38 | 82 | 38 | 162 | 324 | 587 | 155 | 18 | |
| 12 | 2.5 | 2.5 | 38 | 38 | 82 | 38 | 162 | 342 | 612 | 136 | 18 | |
| 13 | 2.5 | 1.2 | 32 | 38 | 82 | 32 | 140 | 342 | 612 | 136 | 18 | |
| 14 | 2.5 | 1.2 | 22 | 38 | 100 | 32 | 130 | 342 | 562 | 136 | 18 | |
| 15 | 2.5 | 2.5 | 18 | 38 | 100 | 38 | 120 | 306 | 562 | 136 | 18 | |
| 16 | 2.5 | 2.5 | 18 | 38 | 100 | 38 | 120 | 306 | 538 | 128 | 12 | |
| 17 | 2.5 | 2.5 | 18 | 51 | 100 | 38 | 130 | 306 | 562 | 120 | 12 | |
| 18 | 2.5 | 4.0 | 18 | 51 | 120 | 38 | 151 | 306 | 562 | 112 | 12 | |
| 19 | 2.5 | 5.5 | 18 | 51 | 120 | 38 | 162 | 272 | 515 | 104 | 12 | |
| 20 | 2.5 | 5.5 | 18 | 51 | 120 | 38 | 140 | 289 | 494 | 97 | 12 | |
| 21 | 2.5 | 5.5 | 18 | 51 | 100 | 38 | 162 | 306 | 472 | 90 | 12 | |
| 22 | 2.5 | 5.5 | 18 | 51 | 91 | 51 | 200 | 380 | 395 | 83 | 10 | |
| 23 | 2.5 | 5.5 | 18 | 51 | 66 | 51 | 257 | 490 | 345 | 76 | 10 | |
| 24 | 2.5 | 27 | 18 | 66 | 51 | 51 | 289 | 490 | 315 | 70 | 10 | |
| 25 | 2.5 | 22 | 18 | 66 | 38 | 74 | 324 | 422 | 285 | 64 | 7 | |
| 26 | 2.5 | 18 | 18 | 66 | 38 | 82 | 380 | 380 | 300 | 58 | 7 | |
| 27 | 2.5 | 18 | 18 | 82 | 38 | 82 | 342 | 380 | 330 | 53 | 7 | |
| 28 | 2.5 | 27 | 18 | 82 | 32 | 110 | 306 | 401 | 300 | 43 | 7 | |
| 29 | 2.5 | 18 | 18 | 242 | ...... | 120 | 289 | 422 | 285 | 34 | 7 | |
| 30 | 2.5 | 18 | 18 | 242 | ...... | 120 | 306 | 422 | 258 | 34 | 7 | |
| 31 | 2.5 | ...... | 18 | 242 | ...... | 140 | ...... | 422 | ...... | 34 | 7 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 5 | 7 | 18 | 90 | 12 | 12 | 34 | 53 | 2 |
| 2 | 5 | 7 | 12 | 136 | 18 | 12 | 34 | 64 | 3 |
| 3 | 5 | 7 | 18 | 104 | 18 | 12 | 34 | 64 | 3 |
| 4 | 5 | 7 | 12 | 104 | 18 | 12 | 34 | 64 | 3 |
| 5 | 5 | 7 | 12 | 120 | 18 | 12 | 34 | 64 | 2 |
| 6 | 5 | 7 | 12 | 120 | 18 | 12 | 34 | 64 | 2 |
| 7 | 5 | 7 | 12 | 18 | 18 | 12 | 34 | 90 | 2 |
| 8 | 5 | 1 | 12 | 12 | 18 | 12 | 34 | 90 | 1 |
| 9 | 5 | 3 | 12 | 18 | 12 | 12 | 34 | 136 | 1 |
| 10 | 5 | 7 | 18 | 12 | 12 | 12 | 34 | 175 | 1 |
| 11 | 5 | 7 | 18 | 12 | 12 | 12 | 34 | 175 | 1 |
| 12 | 5 | 7 | 18 | 18 | 12 | 12 | 34 | 197 | 1 |
| 13 | 7 | 7 | 18 | 12 | 12 | 12 | 34 | 270 | 1 |
| 14 | 7 | 7 | 18 | 12 | 12 | 12 | 34 | 270 | 1 |
| 15 | 7 | 7 | 18 | 12 | 12 | 12 | 34 | 270 | 1 |
| 16 | 7 | 7 | 18 | 12 | 12 | 12 | 34 | 270 | 1 |
| 17 | 7 | 7 | 18 | 12 | 12 | 7 | 34 | 245 | 1 |
| 18 | 7 | 12 | 12 | 12 | 12 | 7 | 34 | 245 | 1 |
| 19 | 7 | 12 | 7 | 12 | 12 | 7 | 34 | 245 | 10 |
| 20 | 7 | 18 | 7 | 12 | 12 | 7 | 34 | 245 | 9 |
| 21 | 7 | 18 | 3 | 12 | 12 | 7 | 34 | 220 | 7 |
| 22 | 7 | 18 | 7 | 12 | 12 | 7 | 34 | 155 | 7 |
| 23 | 7 | 18 | 7 | 12 | 12 | 7 | 34 | 97 | 6 |
| 24 | 7 | 18 | 7 | 12 | 12 | 7 | 34 | 76 | 5 |
| 25 | 7 | 18 | 3 | 15 | 12 | 7 | 34 | 90 | 5 |
| 26 | 7 | 18 | 7 | 83 | 12 | 7 | 34 | 90 | 4 |
| 27 | 7 | 18 | 7 | 104 | 12 | 7 | 34 | 136 | 4 |
| 28 | 7 | 18 | 7 | 90 | 12 | 7 | 34 | 136 | 4 |
| 29 | 7 | 18 | 7 | 76 | 12 | 7 | 34 | 136 | 4 |
| 30 | 7 | 18 | 3 | 53 | ...... | 7 | 34 | 245 | 3 |
| 31 | 7 | ...... | 7 | 18 | ...... | 7 | ...... | 245 | ...... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1, 1909, to May 31, 1909, well defined. June 1, 1909, to Nov. 23, 1909, well defined between 31 and 345 second-feet. Nov. 24, 1909, to Dec. 31, 1910, Jan. 1, 1911, to June 13, 1911, and June 14, 1911, to June 30, 1912, fairly well defined.

*Monthly discharge of Donner Creek near Truckee, Cal., for 1902–1912.*

[Drainage area, 30 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1902–3.** | | | | | | | |
| October 23–31 | 11 | 5 | 7 | 0.23 | 0.08 | 125 | |
| November | 36 | 5 | 14 | .47 | .52 | 833 | |
| December | 51 | 9 | 17 | .57 | .66 | 1,045 | |
| January | 106 | 32 | 54 | 1.80 | 2.08 | 3,320 | |
| February | 67 | 56 | 60 | 2.00 | 2.08 | 3,332 | |
| March | 312 | 56 | 83 | 2.77 | 3.19 | 5,103 | |
| April | 232 | 120 | 166 | 5.53 | 6.17 | 9,878 | |
| May | 352 | 192 | 267 | 8.90 | 10.26 | 16,417 | |
| June | 296 | 56 | 156 | 5.20 | 5.80 | 9,283 | |
| July | 56 | 6 | 23 | .77 | .89 | 1,414 | |
| August | 16 | 1 | 3 | .10 | .12 | 184 | |
| September | 2 | 1 | 1 | .03 | .03 | 60 | |
| The period | | | | | | 51,000 | |
| **1903–4.** | | | | | | | |
| October | 28 | 1 | 3 | .10 | .12 | 184 | |
| November | 280 | 1 | 92 | 3.07 | 3.43 | 5,474 | |
| December | 61 | 7 | 16 | .53 | .61 | 984 | |
| January | 76 | 11 | 29.6 | .987 | 1.14 | 1,820 | |
| February | 693 | 22 | 145 | 4.83 | 5.21 | 8,341 | |
| March | 613 | 216 | 391 | 13.03 | 15.02 | 24,040 | |
| April | 452 | 238 | 312 | 10.40 | 11.60 | 18,560 | |
| May | 709 | 216 | 482 | 16.07 | 18.53 | 29,640 | |
| June | 494 | 196 | 326 | 10.87 | 12.13 | 19,400 | |
| July | 186 | 11 | 59.4 | 1.98 | 2.28 | 3,652 | |
| August | 18 | 4.5 | 11.4 | .380 | .44 | 701 | |
| September | 90 | 3.5 | 30.6 | 1.02 | 1.14 | 1,821 | |
| The year | 709 | 1 | 158 | 5.27 | 71.65 | 115,000 | |
| **1904–5.** | | | | | | | |
| October | 206 | 18 | 50.6 | 1.69 | 1.95 | 3,111 | |
| November | 22 | 2.5 | 12.0 | .400 | .45 | 714 | |
| December | 57 | 3.5 | 9.2 | .307 | .35 | 566 | |
| January | 24 | 11.5 | 17.8 | .593 | .68 | 1,094 | |
| February | 185 | 15 | 53.1 | 1.77 | 1.84 | 2,949 | |
| March | 166 | 100 | 130 | 4.33 | 4.99 | 7,993 | |
| April | 290 | 86 | 163 | 5.43 | 6.06 | 9,699 | |
| May | 269 | 148 | 218 | 7.27 | 8.38 | 13,400 | |
| June | 206 | 29 | 114 | 3.80 | 4.24 | 6,783 | |
| July | 24 | 1.1 | 8.6 | .287 | .33 | 529 | |
| August | 1.1 | .2 | .51 | .017 | .02 | 31 | |
| September | 48 | .5 | 3.6 | .120 | .13 | 214 | |
| The year | 290 | .2 | 65.0 | 2.17 | 29.42 | 47,100 | |
| **1905–6.** | | | | | | | |
| October | 19 | 0 | 4.4 | .147 | .17 | 270 | |
| November | 2 | 0 | .29 | .0097 | .01 | 17 | |
| December | 43 | 0 | 1.6 | .053 | .06 | 98 | |
| January | 300 | 19 | 38.3 | 1.28 | 1.48 | 2,360 | |
| February | 57 | 24 | 32 | 1.07 | 1.11 | 1,780 | |
| March | 86 | 29 | 54.5 | 1.82 | 2.10 | 3,350 | |
| April | 269 | 86 | 161 | 5.37 | 5.99 | 9,580 | |
| May | 698 | 342 | 506 | 16.87 | 19.45 | 31,100 | |
| June | 680 | 342 | 493 | 16.43 | 18.33 | 29,300 | |
| July | 460 | 49 | 269 | 8.97 | 10.34 | 16,500 | |
| August | 42 | 15 | 21.4 | .713 | .82 | 1,320 | |
| September | 15 | 12 | 13.5 | .450 | .50 | 803 | |
| The year | 698 | 0 | 133 | 4.43 | 60.36 | 96,500 | |
| **1906–7.** | | | | | | | |
| October | 15 | 0 | 11.1 | .370 | .43 | 682 | |
| November | 30 | 9 | 16.3 | .543 | .61 | 970 | |
| December | 42 | 12 | 20.0 | .667 | .77 | 1,230 | |
| January | 42 | 15 | 29.9 | .997 | 1.15 | 1,840 | C. |
| February | 186 | 42 | 92.5 | 3.08 | 3.21 | 5,140 | C. |
| March | 980 | 49 | 239 | 7.97 | 9.19 | 14,700 | B. |
| April | 370 | 196 | 296 | 9.87 | 11.01 | 17,600 | A. |
| May | 760 | 289 | 392 | 13.1 | 15.10 | 24,100 | A. |
| June | 626 | 186 | 349 | 11.6 | 12.94 | 20,800 | A. |
| July | 356 | 64 | 158 | 5.27 | 6.08 | 9,720 | A. |
| August | 58 | 34 | 40.1 | 1.34 | 1.54 | 2,470 | B. |
| September | 52 | 18 | 29.9 | .997 | 1.11 | 1,780 | B. |
| The year | 980 | 0 | 139 | 4.65 | 63.14 | 101,000 | |

35,800

... during winter period probably too large on account of ice.

### PROSSER CREEK NEAR TRUCKEE, CAL.

Prosser Creek, a stream about 14 miles long, enters Truckee River from the west about 2 miles southwest of Boca.

The gaging station, which is located just below Alder Creek, about 2 miles above the mouth of Prosser Creek, 4 miles north of Truckee and 3 miles below Hobart Mills, Cal., was established June 27, 1903, discontinued October 15, 1904, and reestablished September 23, 1907, some miscellaneous measurements having been made at this point in the meantime.

Several gages at different datums have been in use at this station. Since 1910 there have been two gages—one, the United States Reclamation Service gage, was installed on the bridge pier January 15, 1909, and repaired June 1, 1911; the other is the property of the Stone & Webster Engineering Corporation and is 150 feet downstream from the bridge.

Discharge measurements are made from a wagon bridge or by means of a car and cable.

The section is subject to change between floods, and the relation between gage height and discharge is at times affected by ice.

Gage heights are furnished by the United States Reclamation Service.

The 1911 discharge measurements made by the Stone & Webster Engineering Corporation have been furnished the United States Geological Survey for publication.

*Discharge measurements of Prosser Creek near Truckee, Cal., in 1903–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1909. | | *Feet.* | *Sec.-ft.* |
| July 18 | G. B. Lorenz | 2.50 | 41 | Jan. 29 | E. A. Porter | 3.20 | 157 |
| 31 | .....do | 2.30 | 28 | Apr. 19 | L. J. Towne | 4.15 | 348 |
| Aug. 6 | .....do | 2.30 | 20 | June 10 | .....do | 4.15 | 305 |
| 14 | .....do | 2.18 | 15 | July 2 | .....do | 3.75 | 222 |
| 27 | .....do | 2.10 | 10 | Aug. 2 | .....do | 2.68 | 52 |
| 1904. | | | | Sept. 12 | F. C. Schafer | 2.20 | 15 |
| Apr. 28 | W. A. Wolf | 3.00 | 217 | Oct. 16 | .....do | 2.30 | 17 |
| May 13 | .....do | 3.95 | 590 | | | | |
| 26 | .....do | 3.50 | 414 | 1910. | | | |
| June 11 | .....do | 3.35 | 346 | Mar. 21 | F. C. Schafer | 4.00 | 308 |
| 16 | A. E. Chandler | 3.20 | 334 | Aug. 26 | .....do | 2.10 | 10 |
| July 1 | W. A. Wolf | 2.92 | 201 | Sept. 21 | T. W. Norcross | [a].89 | 17 |
| 13 | .....do | 2.70 | 130 | Dec. 15 | D. S. Stuver | 2.62 | 34 |
| 23 | .....do | 2.65 | 121 | | | | |
| Aug. 13 | .....do | 2.30 | 40 | 1911. | | | |
| 29 | .....do | 2.15 | 26 | Apr. 15 | J. E. Stewart | 3.32 | 163 |
| Nov. 16 | .....do | 2.20 | 31 | May 31 | Stone & Webster Engineering Corporation | 4.35 | 454 |
| 1905. | | | | | | | |
| May 12 | W. A. Wolf | 2.05 | 129 | June 5 | J. E. Stewart | 4.78 | 608 |
| 23 | .....do | 2.30 | 179 | July 18 | Stone & Webster Engineering Corporation | 3.55 | 194 |
| June 12 | .....do | 2.25 | 165 | | | | |
| 26 | .....do | 2.00 | 120 | Aug. 5 | G. T. Peekema | 2.76 | 57 |
| July 7 | .....do | 1.90 | 101 | 9 | Stone & Webster Engineering Corporation | 2.67 | 56 |
| 27 | .....do | 1.25 | 11 | | | | |
| 1908. | | | | Sept. 26 | F. C. Ebert | 2.27 | 19 |
| May 12 | E. A. Porter | 3.52 | 114 | | | | |
| June 16 | .....do | 3.70 | 138 | | | | |
| July 7 | M. B. Kennedy | 3.30 | 74 | | | | |
| Oct. 16 | E. A. Porter | 3.10 | 47 | | | | |

[a] Gage height refers to Stone & Webster gage.

NOTE.—The datum of the gage read in 1904 was 0.29 foot above that read in 1903. Datum of the gage installed Jan. 15, 1909, was about 0.6 foot above that read in 1908.

*Daily gage height, in feet, of Prosser Creek near Truckee, Cal., for 1903-4.*

| Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|
| 1903. | | | | |
| 1 | ........ | 2.75 | 2.35 | 2.15 |
| 2 | ........ | 2.72 | 2.35 | 2.12 |
| 3 | ........ | 2.72 | 2.30 | 2.12 |
| 4 | ........ | 2.62 | 2.30 | 2.12 |
| 5 | ........ | 2.65 | 2.30 | 2.12 |
| 6 | ........ | 2.55 | 2.30 | 2.12 |
| 7 | ........ | 2.55 | 2.30 | 2.12 |
| 8 | ........ | 2.55 | 2.27 | 2.12 |
| 9 | ........ | 2.50 | 2.25 | 2.12 |
| 10 | ........ | 2.48 | 2.25 | 2.12 |
| 11 | ........ | 2.50 | 2.25 | 2.12 |
| 12 | ........ | 2.55 | 2.22 | 2.12 |
| 13 | ........ | 2.48 | 2.22 | 2.12 |
| 14 | ........ | 2.45 | 2.22 | 2.12 |
| 15 | ........ | 2.48 | 2.22 | 2.12 |
| 16 | ........ | 2.48 | 2.22 | 2.12 |
| 17 | ........ | 2.50 | 2.18 | 2.12 |
| 18 | ........ | 2.48 | 2.18 | 2.12 |
| 19 | ........ | 2.42 | 2.18 | 2.12 |
| 20 | ........ | 2.45 | 2.18 | 2.18 |
| 21 | ........ | 2.45 | 2.18 | 2.18 |
| 22 | ........ | 2.42 | 2.18 | 2.18 |
| 23 | ........ | 2.40 | 2.18 | 2.18 |
| 24 | ........ | 2.38 | 2.20 | 2.18 |
| 25 | ........ | 2.38 | 2.18 | 2.18 |
| 26 | ........ | 2.35 | 2.18 | 2.18 |
| 27 | 2.75 | 2.35 | 2.18 | 2.12 |
| 28 | 2.75 | 2.35 | 2.18 | 2.12 |
| 29 | 2.95 | 2.32 | 2.18 | 2.12 |
| 30 | 2.78 | 2.32 | 2.18 | 2.12 |
| 31 | | 2.35 | 2.18 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903-4. | | | | | | | | | | | | | |
| 1 | 2.15 | ...... | 2.65 | 2.35 | 2.50 | 3.05 | 3.15 | 3.10 | 3.45 | 2.95 | 2.45 | 2.15 | 2.45 |
| 2 | 2.15 | ...... | 2.65 | 2.30 | 2.60 | 3.20 | 3.25 | 3.05 | 3.45 | 2.95 | 2.55 | 2.15 | 2.35 |
| 3 | 2.18 | ...... | 2.55 | 2.55 | 2.65 | 3.25 | 3.30 | 3.05 | 3.50 | 2.95 | 2.45 | 2.15 | 2.35 |
| 4 | 2.18 | ...... | 2.75 | 2.60 | 2.55 | 3.15 | 3.20 | 3.20 | 3.45 | 2.85 | 2.45 | 2.15 | 2.25 |
| 5 | 2.18 | ...... | 2.95 | 2.65 | 2.75 | 3.05 | 3.10 | 3.20 | 3.40 | 2.85 | 2.45 | 2.15 | 2.20 |
| 6 | 2.15 | ...... | 2.85 | 2.70 | 2.90 | 3.15 | 3.20 | 3.25 | 3.45 | 2.85 | 2.45 | 2.15 | 2.35 |
| 7 | 2.15 | ...... | 2.80 | 2.75 | 2.80 | 3.45 | 3.30 | 3.35 | 3.45 | 2.85 | 2.45 | 2.15 | 2.45 |
| 8 | 2.15 | ...... | 2.65 | 2.70 | 2.90 | 3.65 | 3.50 | 3.55 | 3.35 | 2.85 | 2.45 | 2.15 | 2.40 |
| 9 | 2.18 | ...... | 2.60 | 2.65 | 2.80 | 3.45 | 3.60 | 3.65 | 3.25 | 2.75 | 2.40 | 2.15 | 2.45 |
| 10 | 2.30 | ...... | 2.75 | 2.65 | 2.85 | 3.65 | 3.70 | 3.80 | 3.25 | 2.75 | 2.35 | 2.15 | 2.60 |
| 11 | ...... | ...... | 2.65 | 2.55 | 2.95 | 3.45 | 3.75 | 3.80 | 3.25 | 2.75 | 2.35 | 2.15 | 3.40 |
| 12 | ...... | 3.40 | 2.70 | 2.50 | 3.00 | 3.15 | 3.85 | 3.80 | 3.25 | 2.75 | 2.35 | 2.15 | 3.00 |
| 13 | ...... | 3.65 | 2.55 | 2.70 | 3.25 | 3.10 | 4.05 | 3.80 | 3.20 | 2.75 | 2.35 | 2.10 | 2.80 |
| 14 | ...... | 3.70 | 2.75 | 2.55 | 3.55 | 3.05 | 4.10 | 3.75 | 3.25 | 2.70 | 2.35 | 2.10 | 2.70 |
| 15 | ...... | 3.45 | 2.65 | 2.55 | 4.05 | 3.00 | 4.00 | 3.80 | 3.25 | 2.65 | 2.35 | 2.10 | 3.00 |
| 16 | ...... | 3.20 | 2.55 | 2.45 | 4.25 | 3.00 | 3.85 | 3.75 | 3.25 | 2.65 | 2.35 | 2.15 | ...... |
| 17 | ...... | 2.60 | 2.60 | 2.55 | 4.20 | 3.15 | 3.70 | 3.75 | 3.15 | 2.60 | 2.35 | 2.15 | ...... |
| 18 | ...... | 2.50 | 2.55 | 2.55 | 3.85 | 3.35 | 3.65 | 3.75 | 3.15 | 2.60 | 2.25 | 2.10 | ...... |
| 19 | ...... | 2.55 | 2.55 | 2.65 | 3.15 | 4.25 | 3.55 | 3.70 | 3.05 | 2.60 | 2.25 | 2.10 | ...... |
| 20 | ...... | 2.95 | 2.55 | 2.70 | 2.55 | 4.00 | 3.55 | 3.70 | 3.05 | 2.60 | 2.25 | 2.10 | ...... |
| 21 | ...... | 3.85 | 2.65 | 2.75 | 2.90 | 3.50 | 3.35 | 3.70 | 3.05 | 2.60 | 2.25 | 2.10 | ...... |
| 22 | ...... | 3.65 | 2.70 | 2.55 | 3.70 | 3.25 | 3.30 | 3.65 | 3.05 | 2.60 | 2.15 | 2.20 | ...... |
| 23 | ...... | 3.30 | 2.90 | 2.60 | 4.50 | 3.20 | 3.10 | 3.65 | 3.05 | 2.60 | 2.15 | 2.25 | ...... |
| 24 | ...... | 2.90 | 3.00 | 2.55 | 4.70 | 3.05 | 3.10 | 3.65 | 3.05 | 2.55 | 2.20 | 2.25 | ...... |
| 25 | ...... | 2.75 | 2.90 | 2.45 | 4.60 | 3.00 | 3.10 | 3.60 | 3.05 | 2.55 | 2.15 | 2.20 | ...... |
| 26 | ...... | 2.70 | 2.85 | 2.55 | 4.15 | 3.00 | 3.05 | 3.55 | 3.00 | 2.55 | 2.15 | 2.20 | ...... |
| 27 | ...... | 2.60 | 2.85 | 2.65 | 3.95 | 3.05 | 3.05 | 3.55 | 2.95 | 2.55 | 2.15 | 2.15 | ...... |
| 28 | ...... | 2.65 | 2.80 | 2.65 | 3.15 | 3.30 | 3.05 | 3.55 | 3.00 | 2.50 | 2.20 | 2.15 | ...... |
| 29 | ...... | 2.65 | 2.75 | 2.55 | 2.50 | 3.55 | 3.05 | 3.55 | 3.05 | 2.50 | 2.20 | 2.15 | ...... |
| 30 | ...... | 2.70 | 2.95 | 2.60 | ...... | 3.25 | 3.00 | 3.45 | 3.05 | 2.50 | 2.15 | 2.20 | ...... |
| 31 | ...... | ...... | 2.90 | 2.70 | ...... | 3.15 | ...... | 3.45 | ...... | 2.45 | 2.15 | ...... | ...... |

NOTE.—Gage heights for 1904 refer to new datum, 0.29 foot above the former datum.

*Daily gage height, in feet, of Prosser Creek near Truckee, Cal., for 1907–1911.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | | |
| 1 | ...... | 3.0 | 3.0 | 3.0 | 3.7 | 3.4 | ...... | 3.8 | 3.95 | 3.9 | 3.45 | 2.6 | 2.55 |
| 2 | ...... | 3.1 | 3.0 | 3.0 | 3.7 | ...... | 2.9 | 3.8 | 3.85 | 3.8 | 3.45 | 2.6 | 2.65 |
| 3 | ...... | 3.0 | ...... | 3.0 | 3.7 | 3.0 | 2.9 | 3.8 | 3.85 | 3.85 | 3.55 | 2.55 | 2.65 |
| 4 | ...... | 3.0 | 3.0 | 3.1 | 2.9 | 3.0 | 2.9 | 4.0 | 3.8 | 3.9 | 3.55 | 2.55 | 2.6 |
| 5 | ...... | 3.0 | 3.0 | 3.1 | ...... | 3.0 | 2.9 | ...... | 3.75 | 4.0 | 3.45 | 2.6 | 2.7 |
| 6 | ...... | ...... | 3.0 | 3.1 | 3.6 | 3.0 | 2.8 | 3.9 | 3.9 | 4.0 | 3.45 | 2.55 | 2.65 |
| 7 | | 3.0 | 3.0 | ...... | 3.5 | 2.9 | 2.8 | 3.8 | 3.9 | 4.0 | 3.35 | 2.55 | 2.65 |
| 8 | ...... | 3.0 | 3.0 | ...... | 3.7 | 2.9 | ...... | 3.8 | 3.9 | 3.95 | 3.35 | 2.45 | 2.6 |
| 9 | ...... | 3.0 | 3.0 | 3.1 | 3.7 | ...... | 3.0 | 3.9 | 3.85 | 4.0 | 3.25 | 2.45 | 2.7 |
| 10 | ...... | 3.0 | ...... | 3.1 | 3.1 | 3.0 | 3.5 | 3.9 | 3.85 | 3.9 | 3.35 | 2.45 | 2.7 |
| 11 | ...... | 3.0 | 3.0 | 3.1 | 3.9 | 3.2 | 3.3 | 3.9 | 3.95 | 3.95 | 3.35 | 2.45 | 2.8 |
| 12 | ...... | 3.0 | 3.0 | 3.1 | ...... | 3.0 | 3.2 | ...... | 3.9 | 4.1 | 3.55 | 2.4 | 2.8 |
| 13 | ...... | ...... | 3.0 | 3.1 | 3.9 | 3.0 | 3.0 | 3.9 | 3.75 | 4.05 | 3.35 | 2.45 | 2.85 |
| 14 | ...... | 3.0 | 3.0 | 3.1 | 3.9 | 3.0 | 3.0 | 3.9 | 3.7 | 4.0 | 3.25 | 2.5 | 2.85 |
| 15 | ...... | 3.0 | 3.0 | ...... | 3.7 | 3.0 | ...... | 4.0 | 3.8 | 3.8 | 3.15 | 2.45 | 2.9 |
| 16 | ...... | 3.0 | 3.0 | 3.1 | 3.6 | ...... | 3.8 | 4.0 | 3.75 | 3.75 | 3.05 | 2.55 | 2.9 |
| 17 | ...... | 3.0 | ...... | 3.1 | 3.0 | 2.8 | 3.9 | 4.0 | 3.9 | 3.75 | 2.95 | 2.55 | 2.9 |
| 18 | ...... | 3.0 | 3.0 | 3.1 | 3.0 | 2.9 | 4.0 | 3.9 | 3.8 | 3.75 | 2.9 | 2.65 | 2.9 |
| 19 | ...... | 3.0 | 3.0 | 3.1 | ...... | 3.0 | 3.9 | ...... | 3.95 | 3.6 | 2.85 | 2.55 | 2.9 |
| 20 | ...... | ...... | 3.0 | 3.1 | 3.0 | 2.9 | 3.9 | 4.0 | 3.85 | 3.75 | 2.95 | 2.55 | 2.85 |
| 21 | ...... | 3.0 | 3.0 | 3.1 | 3.0 | 2.9 | 3.8 | 4.0 | 3.85 | 3.85 | 2.9 | 2.55 | 2.8 |
| 22 | ...... | 3.0 | 2.9 | ...... | 3.1 | 3.0 | ...... | 4.0 | 3.95 | 3.75 | 2.85 | 2.6 | 2.8 |
| 23 | 3.0 | 3.0 | 2.9 | 3.1 | 3.1 | ...... | 3.7 | 4.0 | 3.9 | 3.65 | 2.9 | 2.55 | 2.85 |
| 24 | 3.0 | 3.1 | ...... | 3.1 | 3.3 | 2.9 | 3.8 | 4.0 | 3.95 | 3.65 | 2.85 | 2.55 | 2.9 |
| 25 | 3.0 | 3.1 | 2.9 | 3.1 | 3.3 | 2.9 | 3.8 | 3.7 | 4.0 | 3.5 | 2.75 | 2.55 | 2.9 |
| 26 | 3.0 | 3.1 | 2.9 | 3.2 | ...... | 2.9 | 3.8 | ...... | 3.9 | 3.55 | 2.85 | 2.6 | 2.8 |
| 27 | 3.0 | ...... | 2.9 | 3.2 | 3.0 | 2.9 | 4.0 | 3.8 | 3.95 | 3.55 | 2.85 | 2.55 | 2.85 |
| 28 | 2.9 | 3.0 | 2.9 | 3.1 | 2.9 | 2.9 | 4.0 | 3.8 | 4.0 | 3.5 | 2.8 | 2.6 | 2.9 |
| 29 | ...... | 3.0 | 2.9 | ...... | 3.3 | 2.7 | ...... | 3.7 | 3.9 | 3.5 | 2.75 | 2.6 | 2.8 |
| 30 | 2.9 | 3.0 | 2.9 | 3.5 | 3.4 | ...... | 3.7 | 3.8 | 3.75 | 3.5 | 2.7 | 2.6 | 2.9 |
| 31 | ...... | 3.0 | ...... | 3.7 | 3.4 | ...... | 3.7 | ...... | 3.85 | ...... | 2.65 | 2.55 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | | | | |
| 1 | 2.9 | 2.8 | 3.05 | 3.2 | 3.0 | 3.1 | 3.15 | 4.9 | 4.65 | 3.75 | 2.9 | 2.0 |
| 2 | 2.8 | 2.8 | 3.0 | 3.25 | 2.9 | 3.05 | 3.25 | 4.85 | 4.85 | 3.6 | 2.75 | 2.0 |
| 3 | 2.85 | 2.85 | 2.95 | 3.25 | 3.0 | 3.05 | 3.35 | 4.95 | 4.75 | 3.6 | 2.7 | 2.0 |
| 4 | 2.9 | 2.8 | 2.9 | 3.25 | 3.0 | 3.1 | 3.35 | 4.95 | 4.65 | 3.55 | 2.65 | 2.1 |
| 5 | 2.85 | 2.8 | 2.9 | 3.25 | 2.85 | 3.1 | 3.35 | 4.85 | 4.75 | 3.5 | 2.65 | 2.2 |
| 6 | 2.9 | 2.8 | 3.0 | 3.55 | 2.75 | 3.05 | 3.35 | 4.85 | 4.65 | 3.5 | 2.65 | 2.2 |
| 7 | 2.9 | 2.8 | 3.05 | 3.5 | 2.7 | 3.0 | 3.35 | 4.85 | 4.65 | 3.45 | 2.55 | 2.15 |
| 8 | 2.9 | 2.8 | 3.2 | 3.45 | 2.65 | 3.05 | 3.35 | 4.75 | 4.65 | 3.45 | 2.5 | 2.15 |
| 9 | 2.85 | 2.8 | 3.1 | 3.4 | 2.6 | 3.15 | 3.45 | 4.65 | 4.7 | 3.45 | 2.45 | 2.15 |
| 10 | 2.9 | 2.8 | 3.0 | 3.55 | 2.6 | 3.15 | 3.65 | 4.65 | 4.35 | 3.35 | 2.45 | 2.2 |
| 11 | 2.9 | 2.85 | 3.0 | 3.6 | 2.55 | 3.15 | 3.85 | 4.55 | 4.3 | 3.45 | 2.35 | 2.2 |
| 12 | 2.9 | 2.85 | 3.05 | 3.7 | 2.55 | 3.15 | 4.2 | 4.5 | 4.4 | 3.45 | 2.35 | 2.2 |
| 13 | 2.9 | 2.8 | 3.0 | 4.05 | 2.5 | 3.25 | 4.4 | 4.45 | 4.4 | 3.4 | 2.35 | 2.2 |
| 14 | 3.05 | 2.8 | 3.0 | 4.65 | 2.5 | 3.25 | 4.45 | 4.45 | 4.4 | 3.45 | 2.35 | 2.2 |
| 15 | 3.9 | 2.85 | 3.05 | 5.1 | 2.75 | 3.2 | 4.5 | 4.45 | 4.35 | 3.4 | 2.25 | 2.2 |
| 16 | 3.25 | 2.85 | 3.05 | 5.7 | 3.0 | 3.25 | 4.6 | 4.35 | 4.3 | 3.45 | 2.25 | 2.2 |
| 17 | 3.0 | 2.85 | 3.0 | 4.9 | 3.15 | 3.2 | 4.65 | 4.35 | 4.15 | 3.4 | 2.2 | 2.3 |
| 18 | 2.95 | 2.8 | 3.0 | 4.5 | 3.2 | 3.15 | 4.9 | 4.25 | 4.05 | 3.35 | 2.2 | 2.3 |
| 19 | 2.9 | 2.8 | 3.0 | 4.1 | 3.15 | 3.25 | 4.85 | 4.25 | 4.05 | 3.35 | 2.1 | 2.3 |
| 20 | 2.9 | 2.8 | 3.0 | 4.1 | 3.1 | 3.25 | 4.5 | 4.2 | 4.05 | 3.3 | 2.1 | 2.3 |
| 21 | 2.85 | 3.05 | 3.0 | 4.3 | 3.25 | 3.2 | 4.25 | 4.15 | 4.15 | 3.3 | 2.1 | 2.3 |
| 22 | 2.85 | 3.1 | 3.0 | 3.95 | 3.3 | 3.2 | 4.25 | 4.05 | 4.15 | 3.3 | 2.1 | 2.3 |
| 23 | 2.9 | 3.1 | 3.0 | 3.8 | 3.45 | 3.15 | 4.35 | 4.05 | 4.15 | 3.3 | 2.1 | 2.25 |
| 24 | 2.9 | 3.05 | 3.1 | 3.75 | 3.45 | 3.05 | 4.25 | 3.95 | 4.15 | 3.15 | 2.1 | 2.25 |
| 25 | 2.85 | 3.0 | 3.15 | 3.6 | 3.4 | 3.0 | 4.25 | 4.05 | 4.05 | 3.15 | 2.0 | 2.3 |
| 26 | 2.85 | 3.0 | 3.05 | 3.6 | 3.3 | 3.0 | 4.35 | 4.15 | 4.05 | 3.1 | 2.0 | 2.3 |
| 27 | 2.9 | 3.0 | 3.05 | 3.45 | 3.25 | 3.0 | 4.6 | 4.15 | 4.05 | 3.0 | 2.0 | 2.35 |
| 28 | 2.85 | 3.0 | 3.15 | 3.35 | 3.2 | 3.05 | 4.85 | 4.2 | 3.9 | 3.0 | 2.0 | 2.35 |
| 29 | 2.8 | 3.15 | 3.15 | 3.1 | ...... | 3.1 | 4.85 | 4.25 | 3.85 | 3.05 | 2.0 | 2.35 |
| 30 | 2.8 | 3.1 | 3.05 | 3.0 | ...... | 3.1 | 4.9 | 4.35 | 3.8 | 3.05 | 2.0 | 2.35 |
| 31 | 2.8 | ...... | 3.05 | 3.0 | ...... | 3.05 | ...... | 4.55 | ...... | 3.0 | 2.0 | ...... |

*Daily gage height, in feet, of Prosser Creek near Truckee, Cal., for 1907–1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 2.3 | 2.8 | 4.5 | 3.9 | 3.75 | 3.5 | 3.65 | 3.9 | 3.8 | 2.85 | 2.1 | 2.1 |
| 2 | 2.35 | 2.8 | 4.3 | 3.8 | 3.85 | 3.35 | 3.7 | 3.85 | 3.8 | 2.8 | 2.1 | 2.1 |
| 3 | 2.45 | 2.8 | 4.0 | 3.8 | 3.85 | 3.25 | 3.8 | 3.8 | 3.7 | 2.7 | 2.1 | 2.1 |
| 4 | 2.45 | 2.8 | 3.85 | 3.85 | 3.8 | 3.25 | 3.75 | 3.75 | 3.75 | 2.7 | 2.1 | 2.1 |
| 5 | 2.45 | 2.9 | 3.7 | 3.8 | 3.8 | 3.4 | 3.75 | 3.55 | 3.7 | 2.7 | 2.1 | 2.1 |
| 6 | 2.55 | 2.9 | 3.6 | 3.9 | 3.8 | 3.45 | 3.75 | 3.5 | 3.7 | 2.7 | 2.1 | 2.1 |
| 7 | 2.55 | 2.8 | 3.6 | 3.9 | 3.8 | 3.45 | 3.95 | 3.5 | 3.65 | 2.7 | 2.1 | 2.1 |
| 8 | 2.55 | 2.8 | 3.5 | 3.8 | 3.8 | 3.4 | 4.05 | 3.6 | 3.6 | 2.7 | 2.1 | 2.1 |
| 9 | 2.55 | 2.8 | 3.5 | 3.8 | 3.7 | 3.4 | 4.05 | 3.75 | 3.6 | 2.6 | 2.1 | 2.1 |
| 10 | 2.55 | 2.8 | 3.4 | 3.8 | 3.7 | 3.4 | 4.05 | 3.8 | 3.6 | 2.6 | 2.1 | 2.1 |
| 11 | 2.55 | 2.8 | 3.4 | 3.8 | 3.7 | 3.55 | 4.05 | 3.85 | 3.6 | 2.6 | 2.1 | 2.1 |
| 12 | 2.65 | 2.8 | 3.4 | 3.75 | 3.75 | 3.6 | 4.05 | 3.8 | 3.55 | 2.5 | 2.1 | 2.1 |
| 13 | 2.65 | 2.8 | 3.35 | 3.75 | 3.75 | 3.75 | 3.95 | 3.75 | 3.55 | 2.5 | 2.1 | 2.1 |
| 14 | 2.65 | 2.8 | 3.3 | 3.7 | 3.75 | 3.8 | 3.95 | 3.65 | 3.5 | 2.4 | 2.1 | 2.1 |
| 15 | 2.65 | 2.7 | 3.3 | 3.7 | 3.7 | 3.75 | 3.95 | 3.65 | 3.5 | 2.4 | 2.1 | 2.1 |
| 16 | 2.65 | 2.7 | 3.3 | 3.6 | 3.8 | 3.75 | 3.8 | 3.7 | 3.5 | 2.4 | 2.1 | 2.1 |
| 17 | 2.65 | 2.7 | 3.4 | 3.6 | 3.8 | 3.95 | 3.85 | 3.7 | 3.45 | 2.4 | 2.1 | 2.1 |
| 18 | 2.65 | 2.7 | 3.4 | 3.6 | 3.8 | 4.0 | 4.05 | 3.7 | 3.4 | 2.4 | 2.1 | 2.1 |
| 19 | 2.65 | 2.8 | 3.4 | 3.6 | 3.8 | 4.4 | 4.05 | 3.6 | 3.35 | 2.4 | 2.1 | 2.1 |
| 20 | 2.65 | 3.6 | 3.4 | 3.6 | 3.8 | 4.25 | 4.15 | 3.6 | 3.3 | 2.4 | 2.1 | 2.1 |
| 21 | 2.65 | 5.3 | 3.35 | 3.7 | 3.8 | 4.0 | 4.15 | 3.6 | 3.3 | 2.4 | 2.1 | 2.1 |
| 22 | 2.65 | 4.3 | 3.3 | 3.7 | 3.8 | 3.8 | 4.05 | 3.6 | 3.3 | 2.4 | 2.1 | 2.1 |
| 23 | 2.66 | 4.0 | 3.3 | 3.7 | 3.8 | 3.8 | 4.05 | 3.7 | 3.3 | 2.4 | 2.1 | 2.1 |
| 24 | 2.7 | 4.0 | 3.2 | 3.75 | 3.8 | 3.75 | 4.05 | 3.65 | 3.3 | 2.2 | 2.1 | 2.1 |
| 25 | 2.7 | 3.85 | 3.2 | 3.8 | 3.8 | 3.45 | 4.05 | 3.65 | 3.3 | 2.2 | 2.1 | 2.1 |
| 26 | 2.7 | 3.8 | 3.2 | 3.8 | 3.8 | 3.45 | 4.05 | 3.7 | 3.3 | 2.2 | 2.1 | 2.1 |
| 27 | 2.7 | 3.65 | 3.2 | 3.6 | 3.7 | 3.45 | 4.05 | 3.7 | 3.2 | 2.1 | 2.1 | 2.1 |
| 28 | 2.8 | 3.45 | 3.2 | 3.65 | 3.6 | 3.4 | 4.15 | 3.7 | 3.1 | 2.1 | 2.1 | 2.1 |
| 29 | 2.85 | 3.4 | 3.3 | 3.6 | ...... | 3.4 | 4.05 | 3.7 | 3.0 | 2.0 | 2.1 | 2.1 |
| 30 | 2.85 | 3.4 | 3.4 | 3.7 | ...... | 3.4 | 4.0 | 3.7 | 2.9 | 2.0 | 2.1 | 2.1 |
| 31 | 2.9 | ...... | 4.0 | 3.65 | ...... | 3.4 | ...... | 3.7 | ...... | 2.0 | 2.1 | ...... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 2.1 | 2.1 | 2.3 | 2.4 | ...... | 1.2 | ...... | 1.9 | 4.4 | 3.95 | 2.9 | 2.35 |
| 2 | 2.1 | 2.2 | 2.3 | 2.4 | ...... | 1.2 | ...... | 1.9 | 4.6 | 3.85 | 2.9 | 2.35 |
| 3 | 2.1 | 2.2 | 2.5 | 2.4 | ...... | 1.2 | ...... | 1.9 | 4.7 | 3.85 | 2.78 | 2.32 |
| 4 | 2.1 | 2.2 | 2.6 | 2.4 | ...... | 1.3 | ...... | 2.2 | 4.8 | 3.85 | 2.8 | 2.3 |
| 5 | 2.1 | 2.2 | 2.5 | 2.4 | ...... | 1.3 | ...... | 2.3 | 4.9 | 3.75 | 2.8 | 2.3 |
| 6 | 2.1 | 2.2 | 2.4 | 2.4 | ...... | 1.3 | ...... | 2.2 | 4.85 | 3.7 | 2.8 | 2.3 |
| 7 | 2.1 | 2.2 | 2.4 | 2.4 | ...... | 1.3 | ...... | 2.1 | 4.7 | 3.75 | 2.8 | 2.3 |
| 8 | 2.1 | 2.2 | 2.3 | 2.4 | ...... | 1.3 | ...... | 2.2 | 4.65 | 3.7 | 2.8 | 2.3 |
| 9 | 2.1 | 2.25 | 2.4 | 2.4 | ...... | 1.1 | ...... | 2.1 | 4.6 | 3.7 | 2.65 | 2.3 |
| 10 | 2.1 | 2.3 | 2.5 | 2.5 | ...... | 1.1 | ...... | 2.1 | 4.6 | 3.6 | 2.58 | 2.3 |
| 11 | 2.1 | 2.3 | 2.7 | 2.6 | ...... | 1.1 | ...... | 2.1 | 4.7 | 3.6 | 2.6 | 2.3 |
| 12 | 2.1 | 2.4 | 2.5 | 2.6 | ...... | 1.15 | ...... | 2.1 | 4.8 | 3.6 | 2.6 | 2.3 |
| 13 | 2.1 | 2.3 | 2.5 | 2.6 | ...... | 1.2 | ...... | 1.9 | 4.7 | 3.65 | 2.6 | 2.3 |
| 14 | 2.2 | 2.2 | 2.3 | 2.6 | ...... | 1.2 | ...... | 4.6 | 4.6 | 3.55 | 2.6 | 2.3 |
| 15 | 2.2 | 2.2 | 2.4 | 3.1 | ...... | 1.2 | 3.32 | 4.6 | 4.7 | 3.5 | 2.6 | 2.25 |
| 16 | 2.2 | 2.2 | 2.4 | 3.1 | ...... | 1.3 | 1.8 | 4.6 | 4.7 | 3.6 | 2.6 | 2.25 |
| 17 | 2.2 | 2.2 | 2.4 | 3.2 | ...... | 1.3 | 1.8 | 4.6 | 4.65 | 3.6 | 2.6 | 2.25 |
| 18 | 2.2 | 2.3 | 2.6 | 3.2 | ...... | 1.4 | 1.9 | 4.5 | 4.6 | 3.45 | 2.6 | 2.20 |
| 19 | 2.2 | 2.3 | 2.5 | 3.3 | ...... | 1.2 | 1.9 | 4.5 | 4.65 | •3.48 | 2.5 | 2.20 |
| 20 | 2.2 | 2.3 | 2.5 | 3.4 | ...... | 1.0 | 1.8 | 4.4 | 4.75 | 3.48 | 2.5 | 2.25 |
| 21 | 2.2 | 2.3 | 2.5 | 3.4 | ...... | 1.1 | 1.8 | 4.4 | 4.6 | 3.25 | 2.5 | 2.25 |
| 22 | 2.2 | 2.3 | 2.4 | 3.4 | ...... | 1.1 | 1.9 | 4.6 | 4.4 | 3.18 | 2.5 | 2.25 |
| 23 | 2.1 | 2.4 | 2.4 | 3.4 | ...... | 1.3 | 1.9 | 4.85 | 4.2 | 3.15 | 2.5 | 2.25 |
| 24 | 2.1 | 2.5 | 2.3 | 3.5 | ...... | 1.2 | 2.1 | 4.8 | 4.1 | 3.15 | 2.48 | 2.25 |
| 25 | 2.1 | 2.4 | 2.3 | 3.4 | ...... | 1.1 | 2.2 | 4.6 | 3.9 | 3.15 | 2.42 | 2.25 |
| 26 | 2.1 | 2.4 | 2.3 | 3.6 | ...... | 1.2 | 2.3 | 4.5 | 4.1 | 3.10 | 2.45 | 2.25 |
| 27 | 2.1 | 2.4 | 2.3 | 3.7 | ...... | 1.4 | 2.2 | 4.5 | 4.25 | 3.02 | 2.4 | 2.25 |
| 28 | 2.1 | 2.4 | 2.3 | 3.8 | ...... | 1.3 | 1.9 | 4.5 | 4.2 | 3.0 | 2.4 | 2.25 |
| 29 | 2.1 | 2.4 | 2.4 | ...... | ...... | 1.3 | 1.9 | 4.6 | 4.1 | 2.9 | 2.4 | 2.25 |
| 30 | 2.1 | 2.3 | 2.4 | ...... | ...... | 1.3 | 1.9 | 4.6 | 3.85 | 2.9 | 2.4 | 2.25 |
| 31 | 2.1 | ...... | 2.4 | ...... | ...... | 1.3 | ...... | 4.6 | ...... | 2.85 | 2.35 | ...... |

*Daily gage height, in feet, of Prosser Creek near Truckee, Cal., for 1907-1911*—Continued.

| Day. | Oct. | Nov. | Day. | Oct. | Nov. | Day. | Oct. | Nov. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | 2.22 | 2.4 | 11 | | 2.5 | 21 | | 2.3 |
| 2 | 2.22 | 2.4 | 12 | | 2.2 | 22 | | 2.4 |
| 3 | 2.22 | 2.4 | 13 | | 2.3 | 23 | | 2.4 |
| 4 | 2.3 | 2.4 | 14 | | 2.6 | 24 | | 2.4 |
| 5 | 2.3 | 2.4 | 15 | | 2.3 | 25 | | 2.4 |
| 6 | 2.3 | 2.4 | 16 | | 2.4 | 26 | | 2.4 |
| 7 | 2.3 | 2.4 | 17 | | 2.2 | 27 | | 2.4 |
| 8 | | 2.4 | 18 | | 2.4 | 28 | | 2.3 |
| 9 | | 2.4 | 19 | | 2.2 | 29 | | 2.2 |
| 10 | | 2.5 | 20 | | 2.5 | 30 | | 2.1 |
| | | | | | | 31 | | |

NOTE.—Gage heights Jan. 15, 1909, to Jan. 31, 1911, Apr. 15, 1911, and after May 14, 1911, refer to the United States Reclamation Service gage painted on the bridge pier; datum differs from that of the gage used prior to Jan. 15, 1909. Gage heights Mar. 1-31 and Apr. 16 to May 13, 1911, refer to Stone and Webster Engineering Corporation gage. No record February, Apr. 1-14, and Oct. 8-31, 1911. Gage heights for December, 1911, discarded as unreliable. There was ice in the creek Dec. 1, 1907, to Feb. 15, 1908, Dec. 24-31, 1908, and during other periods.

Gage heights for 1912 withheld on account of the unreliability of the datum.

*Rating table for Prosser Creek near Truckee, Cal., from June 27, 1903, to December 31, 1904.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 2.10 | 23 | 2.90 | 190 | 3.70 | 490 | 4.50 | 836 |
| 2.20 | 30 | 3.00 | 221 | 3.80 | 532 | 4.60 | 880 |
| 2.30 | 42 | 3.10 | 256 | 3.90 | 574 | 4.70 | 924 |
| 2.40 | 59 | 3.20 | 293 | 4.00 | 616 | 4.80 | 968 |
| 2.50 | 80 | 3.30 | 331 | 4.10 | 660 | 4.90 | 1,012 |
| 2.60 | 103 | 3.40 | 370 | 4.20 | 704 | 5.00 | 1,056 |
| 2.70 | 130 | 3.50 | 410 | 4.30 | 748 | 5.10 | 1,100 |
| 2.80 | 160 | 3.60 | 450 | 4.40 | 792 | | |

NOTE.—Table is applicable only to open channel. It is based upon 15 discharge measurements made during 1903 and 1904. It is well defined between gage heights 1.80 feet and 3.50 feet. To make this table applicable for 1903, gage heights for 1903 should be reduced 0.3 foot.

*Daily discharge, in second-feet, of Prosser Creek near Truckee, Cal., for 1907-1911.*

| Day. | Sept. | Oct. | Nov. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907-8. | | | | | | | | | | | |
| 1 | | 38 | 38 | 29 | 22 | 159 | 190 | 179 | 96 | 11 | 9 |
| 2 | | 48 | 38 | 29 | 29 | 159 | 169 | 159 | 96 | 11 | 14 |
| 3 | | 38 | 38 | 29 | 29 | 159 | 169 | 169 | 114 | 9 | 14 |
| 4 | | 38 | 38 | 29 | 29 | 200 | 159 | 179 | 114 | 9 | 11 |
| 5 | | 38 | 38 | 29 | 29 | 190 | 150 | 200 | 96 | 11 | 16 |
| 6 | | 38 | 38 | 29 | 22 | 179 | 179 | 200 | 96 | 9 | 14 |
| 7 | | 38 | 38 | 29 | 22 | 159 | 179 | 200 | 81 | 9 | 14 |
| 8 | | 38 | 38 | 29 | 30 | 159 | 179 | 190 | 81 | 6 | 11 |
| 9 | | 38 | 38 | 29 | 38 | 179 | 169 | 200 | 67 | 6 | 16 |
| 10 | | 38 | 38 | 29 | 105 | 179 | 169 | 179 | 81 | 6 | 16 |
| 11 | | 38 | 38 | 29 | 74 | 179 | 190 | 190 | 81 | 6 | 22 |
| 12 | | 38 | 38 | 29 | 60 | 179 | 179 | 221 | 114 | 4 | 22 |
| 13 | | 38 | 38 | 29 | 38 | 179 | 150 | 210 | 81 | 6 | 26 |
| 14 | | 38 | 38 | 29 | 38 | 179 | 140 | 200 | 67 | 7 | 26 |
| 15 | | 38 | 38 | 29 | 88 | 200 | 159 | 159 | 54 | 6 | 29 |
| 16 | | 38 | 38 | 29 | 159 | 200 | 150 | 150 | 43 | 9 | 29 |
| 17 | | 38 | 38 | 22 | 179 | 200 | 179 | 150 | 34 | 9 | 29 |
| 18 | | 38 | 38 | 29 | 200 | 179 | 159 | 150 | 29 | 14 | 29 |
| 19 | | 38 | 38 | 38 | 179 | 190 | 190 | 122 | 26 | 9 | 29 |
| 20 | | 38 | 38 | 29 | 179 | 200 | 169 | 150 | 34 | 9 | 26 |

*Daily discharge, in second-feet, of Prosser Creek near Truckee, Cal., for 1907-1911*—Con.

| Day. | Sept. | Oct. | Nov. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1907-8.** | | | | | | | | | | | |
| 21 | ...... | 38 | 38 | 29 | 159 | 200 | 169 | 169 | 29 | 9 | 22 |
| 22 | ...... | 38 | 29 | 38 | 150 | 200 | 190 | 150 | 26 | 11 | 22 |
| 23 | 38 | 38 | 29 | 34 | 140 | 200 | 179 | 131 | 29 | 9 | 26 |
| 24 | 38 | 48 | 29 | 29 | 159 | 200 | 190 | 131 | 26 | 9 | 29 |
| 25 | 38 | 48 | 29 | 29 | 159 | 140 | 200 | 105 | 19 | 9 | 29 |
| 26 | 38 | 48 | 29 | 29 | 159 | 150 | 179 | 114 | 26 | 11 | 22 |
| 27 | 38 | 43 | 29 | 29 | 200 | 159 | 190 | 114 | 26 | 9 | 26 |
| 28 | 29 | 38 | 29 | 29 | 200 | 159 | 200 | 105 | 22 | 11 | 29 |
| 29 | 29 | 38 | 29 | 16 | 170 | 140 | 179 | 105 | 19 | 11 | 22 |
| 30 | 29 | 38 | 29 | ...... | 140 | 159 | 150 | 105 | 16 | 11 | 29 |
| 31 | ...... | 38 | ...... | ...... | 140 | ...... | 169 | ...... | 14 | 9 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1908-9.** | | | | | | | | | | | | |
| 1 | 29 | 22 | 43 | 60 | 89 | 105 | 114 | 665 | 483 | 224 | 76 | 7 |
| 2 | 22 | 22 | 38 | 67 | 76 | 97 | 132 | 640 | 568 | 188 | 58 | 7 |
| 3 | 26 | 26 | 34 | 67 | 89 | 97 | 151 | 692 | 524 | 188 | 52 | 7 |
| 4 | 29 | 22 | 29 | 67 | 89 | 105 | 151 | 692 | 483 | 178 | 47 | 10 |
| 5 | 26 | 22 | 29 | 67 | 70 | 105 | 151 | 640 | 524 | 168 | 47 | 14 |
| 6 | 29 | 22 | 38 | 114 | 58 | 97 | 151 | 640 | 483 | 168 | 47 | 14 |
| 7 | 29 | 22 | 43 | 105 | 52 | 89 | 151 | 640 | 483 | 158 | 38 | 12 |
| 8 | 29 | 22 | 60 | 96 | 47 | 97 | 151 | 581 | 483 | 158 | 34 | 12 |
| 9 | 26 | 22 | 48 | 88 | 42 | 114 | 172 | 545 | 503 | 158 | 30 | 12 |
| 10 | 29 | 22 | 38 | 114 | 42 | 114 | 216 | 545 | 369 | 139 | 30 | 14 |
| 11 | 29 | 26 | 38 | 122 | 38 | 114 | 264 | 502 | 352 | 158 | 24 | 14 |
| 12 | 29 | 26 | 43 | 140 | 38 | 114 | 370 | 480 | 386 | 158 | 24 | 14 |
| 13 | 29 | 22 | 38 | 210 | 34 | 132 | 440 | 460 | 386 | 148 | 24 | 14 |
| 14 | 43 | 22 | 38 | 347 | 34 | 132 | 460 | 460 | 386 | 158 | 24 | 14 |
| 15 | 179 | 26 | 43 | 879 | 58 | 123 | 480 | 460 | 369 | 148 | 17 | 14 |
| 16 | 67 | 26 | 43 | 1,290 | 89 | 132 | 523 | 422 | 352 | 158 | 17 | 14 |
| 17 | 38 | 26 | 38 | 764 | 114 | 123 | 545 | 422 | 305 | 148 | 14 | 20 |
| 18 | 34 | 22 | 38 | 560 | 123 | 114 | 665 | 386 | 276 | 139 | 14 | 20 |
| 19 | 29 | 22 | 38 | 393 | 114 | 132 | 640 | 386 | 276 | 139 | 10 | 20 |
| 20 | 29 | 22 | 38 | 393 | 105 | 132 | 480 | 370 | 276 | 129 | 10 | 20 |
| 21 | 26 | 43 | 38 | 470 | 132 | 123 | 386 | 353 | 330 | 129 | 10 | 20 |
| 22 | 26 | 48 | 38 | 344 | 141 | 123 | 386 | 321 | 330 | 129 | 10 | 20 |
| 23 | 29 | 48 | 38 | 298 | 172 | 114 | 422 | 321 | 330 | 129 | 10 | 17 |
| 24 | 29 | 43 | 48 | 284 | 172 | 97 | 386 | 291 | 330 | 114 | 10 | 17 |
| 25 | 26 | 38 | 54 | 246 | 161 | 89 | 386 | 276 | 300 | 114 | 7 | 20 |
| 26 | 26 | 38 | 43 | 246 | 141 | 89 | 422 | 305 | 300 | 105 | 7 | 20 |
| 27 | 29 | 38 | 43 | 210 | 132 | 89 | 523 | 305 | 300 | 89 | 7 | 24 |
| 28 | 26 | 38 | 54 | 196 | 123 | 97 | 640 | 330 | 270 | 89 | 7 | 24 |
| 29 | 22 | 54 | 54 | 136 | ...... | 105 | 640 | 336 | 248 | 97 | 7 | 24 |
| 30 | 22 | 48 | 43 | 118 | ...... | 105 | 665 | 369 | 236 | 97 | 7 | 24 |
| 31 | 22 | ...... | 43 | 118 | ...... | 97 | ...... | 443 | ...... | 89 | 7 | ...... |
| **1909-10.** | | | | | | | | | | | | |
| 1 | 20 | 63 | 480 | 277 | 240 | 182 | 216 | 277 | 252 | 70 | 10 | 10 |
| 2 | 24 | 63 | 403 | 252 | 264 | 151 | 227 | 264 | 252 | 63 | 10 | 10 |
| 3 | 30 | 63 | 305 | 252 | 264 | 132 | 252 | 252 | 227 | 52 | 10 | 10 |
| 4 | 30 | 63 | 264 | 264 | 252 | 132 | 240 | 240 | 240 | 52 | 10 | 10 |
| 5 | 30 | 76 | 227 | 252 | 252 | 161 | 240 | 193 | 227 | 52 | 10 | 10 |
| 6 | 38 | 76 | 204 | 277 | 252 | 172 | 240 | 182 | 227 | 52 | 10 | 10 |
| 7 | 38 | 63 | 204 | 277 | 252 | 172 | 291 | 182 | 216 | 52 | 10 | 10 |
| 8 | 38 | 63 | 182 | 252 | 252 | 161 | 321 | 204 | 204 | 52 | 10 | 10 |
| 9 | 38 | 63 | 182 | 252 | 227 | 161 | 321 | 240 | 204 | 42 | 10 | 10 |
| 10 | 38 | 63 | 161 | 252 | 227 | 161 | 321 | 252 | 204 | 42 | 10 | 10 |
| 11 | 38 | 63 | 161 | 252 | 227 | 193 | 321 | 264 | 204 | 42 | 10 | 10 |
| 12 | 47 | 63 | 161 | 240 | 240 | 204 | 321 | 252 | 193 | 34 | 10 | 10 |
| 13 | 47 | 63 | 151 | 240 | 240 | 240 | 291 | 240 | 193 | 34 | 10 | 10 |
| 14 | 47 | 63 | 141 | 227 | 240 | 252 | 291 | 216 | 182 | 27 | 10 | 10 |
| 15 | 47 | 52 | 141 | 227 | 227 | 240 | 291 | 216 | 182 | 27 | 10 | 10 |
| 16 | 47 | 52 | 141 | 204 | 252 | 240 | 252 | 227 | 182 | 27 | 10 | 20 |
| 17 | 47 | 52 | 161 | 204 | 252 | 291 | 264 | 227 | 172 | 27 | 10 | 20 |
| 18 | 47 | 52 | 161 | 204 | 252 | 305 | 321 | 227 | 161 | 27 | 10 | 10 |
| 19 | 47 | 63 | 161 | 204 | 252 | 440 | 321 | 204 | 151 | 27 | 10 | 10 |
| 20 | 47 | 204 | 161 | 204 | 252 | 386 | 354 | 204 | 141 | 27 | 10 | 10 |

*Daily discharge, in second-feet, of Prosser Creek near Truckee, Cal., for 1907–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 21 | 47 | 980 | 151 | 227 | 252 | 305 | 354 | 304 | 142 | [illegible] | 16 | 10 |
| 22 | 47 | 483 | 141 | 227 | 252 | 252 | 321 | 304 | 142 | [illegible] | 16 | 16 |
| 23 | 47 | 305 | 141 | 227 | 252 | 252 | 321 | 227 | 141 | [illegible] | 16 | 10 |
| 24 | 52 | 305 | 123 | 240 | 252 | 240 | 321 | 226 | 142 | 14 | 16 | 10 |
| 25 | 52 | 264 | 123 | 252 | 252 | 172 | 321 | 216 | 141 | 14 | 16 | 10 |
| 26 | 52 | 252 | 123 | 252 | 252 | 172 | 321 | 227 | 142 | 14 | 16 | 10 |
| 27 | 52 | 216 | 123 | 304 | 227 | 172 | 321 | 227 | 125 | 16 | 16 | 10 |
| 28 | 63 | 172 | 123 | 216 | 304 | 161 | 354 | 227 | 105 | 16 | 16 | 10 |
| 29 | 70 | 161 | 141 | 304 | ...... | 161 | 321 | 227 | 90 | [illegible] | 16 | 10 |
| 30 | 70 | 161 | 161 | 227 | ...... | 161 | 305 | 227 | 76 | [illegible] | 16 | 10 |
| 31 | 76 | ...... | 305 | 216 | ...... | 161 | ...... | 227 | ...... | [illegible] | 16 | ...... |
| **1910–11.** | | | | | | | | | | | | |
| 1 | 10 | 10 | 20 | 25 | 120 | 95 | 153 | 326 | 463 | 302 | 79 | 24 |
| 2 | 10 | 14 | 20 | 25 | 250 | 95 | 221 | 326 | 544 | 272 | 79 | 24 |
| 3 | 10 | 14 | 34 | 25 | 190 | 95 | 280 | 326 | 566 | 272 | 65 | 22 |
| 4 | 10 | 14 | 42 | 25 | 138 | 107 | 296 | 402 | 630 | 272 | 65 | 21 |
| 5 | 10 | 14 | 34 | 25 | 120 | 107 | 240 | 562 | 675 | 244 | 65 | 21 |
| 6 | 10 | 14 | 27 | 25 | 120 | 107 | 250 | 482 | 652 | 230 | 65 | 21 |
| 7 | 10 | 14 | 27 | 25 | 125 | 107 | 280 | 425 | 566 | 244 | 65 | 21 |
| 8 | 10 | 14 | 20 | 25 | 100 | 107 | 280 | 482 | 565 | 230 | 65 | 21 |
| 9 | 10 | 17 | 27 | 25 | 90 | 65 | 296 | 425 | 544 | 230 | 56 | 21 |
| 10 | 10 | 20 | 34 | 25 | 90 | 65 | 300 | 425 | 544 | 205 | 43 | 21 |
| 11 | 10 | 20 | 52 | 45 | 70 | 65 | 227 | 425 | 566 | 305 | 45 | 21 |
| 12 | 10 | 27 | 34 | 45 | 90 | 75 | 214 | 425 | 630 | 305 | 45 | 21 |
| 13 | 10 | 20 | 34 | 45 | 90 | 65 | 296 | 326 | 566 | 226 | 45 | 21 |
| 14 | 14 | 14 | 20 | 45 | 90 | 95 | 107 | 544 | 544 | 294 | 45 | 21 |
| 15 | 14 | 14 | 27 | 107 | 70 | 65 | 144 | 544 | 566 | 182 | 45 | 18 |
| 16 | 14 | 14 | 27 | 107 | 75 | 107 | 270 | 544 | 566 | 305 | 45 | 18 |
| 17 | 14 | 14 | 27 | 123 | 90 | 107 | 270 | 544 | 565 | 305 | 45 | 15 |
| 18 | 14 | 20 | 42 | 123 | 90 | 122 | 326 | 502 | 544 | 171 | 45 | 15 |
| 19 | 14 | 20 | 34 | 140 | 90 | 95 | 326 | 544 | 565 | 176 | 36 | 15 |
| 20 | 14 | 20 | 34 | 160 | 90 | 65 | 270 | 463 | 606 | 176 | 36 | 15 |
| 21 | 14 | 20 | 34 | 160 | 90 | 65 | 270 | 463 | 544 | 122 | 30 | 16 |
| 22 | 14 | 20 | 27 | 160 | 90 | 65 | 326 | 544 | 463 | 130 | 30 | 16 |
| 23 | 10 | 27 | 27 | 160 | 85 | 107 | 326 | 652 | 346 | 125 | 30 | 16 |
| 24 | 10 | 34 | 20 | 182 | 85 | 65 | 425 | 420 | 352 | 125 | 34 | 16 |
| 25 | 10 | 27 | 20 | 160 | 85 | 65 | 482 | 544 | 286 | 115 | 30 | 16 |
| 26 | 10 | 27 | 20 | 305 | 85 | 95 | 562 | 503 | 352 | 107 | 32 | 18 |
| 27 | 10 | 27 | 20 | 230 | 85 | 122 | 482 | 503 | 406 | 95 | 28 | 16 |
| 28 | 10 | 27 | 20 | 256 | 85 | 107 | 326 | 503 | 355 | 92 | 28 | 16 |
| 29 | 10 | 27 | 27 | 280 | ...... | 107 | 326 | 544 | 352 | 79 | 28 | 16 |
| 30 | 10 | 20 | 27 | 330 | ...... | 107 | 326 | 544 | 272 | 79 | 25 | 16 |
| 31 | 10 | ...... | 27 | 330 | ...... | 107 | ...... | 544 | ...... | 73 | 24 | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1911.** | | | | **1911.** | | | | **1911.** | | | |
| 1 | 16 | 26 | 20 | 11 | 21 | 36 | 13 | 21 | 24 | 21 | 19 |
| 2 | 16 | 26 | 14 | 12 | 21 | 15 | 13 | 22 | 22 | 26 | 12 |
| 3 | 16 | 26 | 7 | 13 | 22 | 21 | 12 | 23 | 24 | 26 | 10 |
| 4 | 21 | 26 | 21 | 14 | 22 | 45 | 19 | 24 | 23 | 28 | 8 |
| 5 | 21 | 26 | 14 | 15 | 22 | 21 | 8 | 25 | 23 | 25 | 7 |
| 6 | 21 | 28 | 15 | 16 | 21 | 28 | 6 | 26 | 23 | 28 | 6 |
| 7 | 21 | 28 | 13 | 17 | 21 | 15 | 6 | 27 | 23 | 25 | 5 |
| 8 | 21 | 28 | 11 | 18 | 22 | 28 | 6 | 28 | 24 | 21 | 7 |
| 9 | 21 | 26 | 12 | 19 | 24 | 15 | 6 | 29 | 25 | 15 | 9 |
| 10 | 21 | 36 | 13 | 20 | 26 | 36 | 5 | 30 | 26 | 10 | 7 |
| | | | | | | | | 31 | 27 | ...... | 8 |

NOTE.—Daily discharge determined from rating curves applicable as follows: Sept. 23, 1907, to Jan. 14, 1909, well defined between discharges of 28 and 200 second-feet. Discharge Dec. 1, 1907, to Feb. 16, 1908, estimated on account of ice. Jan. 15 to July 23, 1909, indirect method for shifting channels used. July 24, 1909, to Dec. 31, 1910, well defined. Jan. 1 to Dec. 31, 1911, two fairly well defined curves, one for the United States Reclamation Service gage and one for the Stone & Webster gage. Discharge interpolated or estimated for days on which gage was not read.

*Daily gage height, in feet, of Prosser Creek near Boca, Cal., for 1902–3*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|
| 16 | ........ | 0.80 | 0.55 | 0.65 | ........ | ........ | 2.40 | ........ |
| 17 | ........ | .85 | .65 | .50 | ........ | ........ | 1.40 | ........ |
| 18 | ........ | .85 | .85 | .60 | ........ | ........ | 1.20 | ........ |
| 19 | ........ | .80 | .95 | .65 | ........ | ........ | 1.18 | ........ |
| 20 | ........ | .80 | .75 | .65 | ........ | ........ | 1.18 | ........ |
| 21 | ........ | .85 | .75 | .75 | ........ | 1.80 | 1.15 | ........ |
| 22 | ........ | .80 | .55 | .80 | ........ | 1.90 | 1.10 | ........ |
| 23 | 0.85 | .85 | .45 | 1.65 | ........ | 2.07 | 1.10 | ........ |
| 24 | .95 | .80 | .35 | 2.15 | ........ | 2.25 | 1.10 | ........ |
| 25 | .85 | .80 | .45 | 2.15 | ........ | 2.30 | 1.10 | ........ |
| 26 | .85 | .80 | .35 | 1.10 | ........ | 2.35 | 1.18 | ........ |
| 27 | .85 | .80 | 55 | 1.05 | ........ | 2.05 | 1.10 | ........ |
| 28 | .90 | .85 | .35 | .90 | ........ | 2.04 | 1.15 | ........ |
| 29 | .85 | .80 | .45 | .85 | ........ | 2.07 | 1.20 | ........ |
| 30 | .85 | .75 | .40 | .80 | ........ | 2.11 | 2.15 | ........ |
| 31 | .80 | ........ | .45 | .85 | ........ | ........ | 2.30 | ........ |

*Monthly discharge of Prosser Creek at Boca, Cal., for 1889–90.*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). |
|---|---|---|
| **1889.** | | |
| April | [a]100 | 5,950 |
| May | 250 | 15,900 |
| June | 110 | 6,540 |
| July | 17 | 1,060 |
| August | 3 | 184 |
| September | 2 | 119 |
| The period | ......... | 29,700 |
| **1890.** | | |
| April | 340 | 20,200 |
| May | 817 | 50,200 |
| June | 580 | 34,500 |
| July | 382 | 23,500 |
| August | 102 | 6,270 |
| September | 57 | 3,390 |
| The period | ......... | 138,000 |
| October | 42 | 2,580 |
| November | 38 | 2,260 |

[a] Estimated.

## SOUTH FORK OF PROSSER CREEK NEAR TRUCKEE, CAL.

This station is located at the bridge at Evers Valley, in the SW. ¼ sec. 25, T. 18 N., R. 15 E., about 2 miles above the junction with the North Fork of Prosser Creek, and 6 miles northwest of Truckee.

The drainage area above the station is about 5.8 square miles.

The gage is a vertical staff at bridge from which discharge measurements are made.

The channel is composed of sand and gravel and is somewhat shifting.

The results are excellent, except during the winter season, when the flow is affected by ice.

The following records of daily discharge were furnished by the Stone & Webster Engineering Corporation:

*Daily discharge, in second-feet, of South Fork of Prosser Creek near Truckee, Cal., for 1909–10.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7 | 175 | 25 | 21 | 21 | 25 | [illegible] | [illegible] | [illegible] | a4 |
| 2 | 7 | 115 | 17 | 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | a4 |
| 3 | 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | a4 |
| 4 | 7 | [illegible] | 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| 5 | 8 | 34 | 7 | [illegible] | 21 | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| 6 | 10 | 25 | [illegible] | [illegible] | 21 | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| 7 | 12 | [illegible] | [illegible] | [illegible] | 21 | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| 8 | 10 | 24 | 13 | 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| 9 | 10 | 65 | 17 | 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| 10 | 7 | 74 | 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| 11 | 6 | [illegible] | 24 | 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| 12 | 4 | 24 | [illegible] | 21 | 25 | 65 | [illegible] | [illegible] | [illegible] | 4 |
| 13 | 7 | [illegible] | 24 | [illegible] | [illegible] | 65 | [illegible] | a[illegible] | [illegible] | 4 |
| 14 | 10 | 24 | 24 | 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| 15 | 7 | [illegible] | [illegible] | 17 | [illegible] | 24 | [illegible] | [illegible] | 4 | 4 |
| 16 | 7 | [illegible] | 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | 4 |
| 17 | 56 | [illegible] | 13 | 13 | [illegible] | [illegible] | [illegible] | 21 | 4 | 4 |
| 18 | 78 | 21 | 13 | 13 | [illegible] | [illegible] | [illegible] | 21 | 4 | 4 |
| 19 | 100 | 25 | 21 | [illegible] | 45 | [illegible] | [illegible] | 21 | 4 | 4 |
| 20 | 153 | 17 | 21 | [illegible] | 34 | [illegible] | [illegible] | 21 | 4 | 4 |
| 21 | 144 | [illegible] | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | 4 |
| 22 | 162 | [illegible] | 25 | 17 | [illegible] | [illegible] | [illegible] | 21 | 4 | 4 |
| 23 | 166 | 21 | [illegible] | 13 | [illegible] | [illegible] | [illegible] | 21 | 4 | 4 |
| 24 | 158 | 17 | 25 | 13 | 24 | [illegible] | [illegible] | [illegible] | 4 | 4 |
| 25 | 164 | 17 | 21 | 17 | 21 | [illegible] | [illegible] | [illegible] | 4 | 4 |
| 26 | 144 | 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | 4 |
| 27 | 104 | 25 | 21 | 17 | 21 | [illegible] | [illegible] | [illegible] | 4 | 4 |
| 28 | 53 | [illegible] | 24 | [illegible] | 25 | [illegible] | 41 | [illegible] | 4 | 4 |
| 29 | 30 | [illegible] | [illegible] | ........ | 25 | 24 | [illegible] | [illegible] | 4 | 4 |
| 30 | 52 | 24 | 20 | ........ | 25 | [illegible] | [illegible] | [illegible] | 4 | 4 |
| 31 | ........ | [illegible] | 24 | ........ | [illegible] | ........ | [illegible] | ........ | 4 | 4 |

a Interpolated by engineers of the United States Geological Survey.

*Monthly discharge of South Fork of Prosser Creek near Truckee, Cal., for 1909–10.*

[Drainage area, 5.8 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| November | 166 | 4 | [illegible] | 9.71 | 10.[illegible] | [illegible] |
| December | 175 | 10 | [illegible] | 6.79 | 7.[illegible] | 2,4[illegible] |
| January | 30 | 7 | [illegible] | [illegible] | 2.[illegible] | 1,210 |
| February | 30 | 10 | [illegible] | [illegible] | [illegible] | 1,[illegible] |
| March | 45 | [illegible] | [illegible] | 4.47 | 5.15 | 1,[illegible] |
| April | 113 | 25 | [illegible] | 11.[illegible] | 12.[illegible] | 3,910 |
| May | 162 | 47 | [illegible] | 11.[illegible] | 13.[illegible] | 4,050 |
| June | 65 | 13 | [illegible] | 4.[illegible] | 5.47 | 1,[illegible] |
| July | 13 | 4 | 6.[illegible] | 1.17 | 1.35 | 418 |
| August | 4 | 4 | 4.0 | .[illegible] | .80 | 246 |
| The period | | | | | | 19,900 |

NOTE.—Monthly values computed by engineers of the United States Geological Survey.

## LITTLE TRUCKEE RIVER NEAR TRUCKEE, CAL.

This station is located at the trail crossing in the SW. ¼ sec. 26, T. 14 N., R. 14 E., about 4 miles above the mouth of Independence Creek, and 14 miles northwest of Truckee.

The gage is a vertical staff near the car and cable from which discharge measurements are made. The channel is compact gravel and fairly permanent. The drainage area above the station is about 33.2 square miles.

Results are excellent, except during the winter season, when the flow is affected by ice.

The following records of daily discharge were furnished by the Stone & Webster Engineering Corporation.

*Daily discharge, in second-feet, of Little Truckee River near Truckee, Cal., for 1909–10.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 18 | 319 | 74 | 47 | 74 | 205 | 342 | 287 | 67 | 3 |
| 2 | | 18 | 319 | 74 | 47 | 74 | 205 | 296 | 287 | 60 | 2 |
| 3 | | 18 | 261 | 74 | 47 | 74 | 205 | 319 | 237 | 67 | 2 |
| 4 | | 12 | 183 | 60 | 47 | 74 | 205 | 319 | 237 | 75 | 2 |
| 5 | | 18 | 137 | 47 | 47 | 83 | 205 | 342 | 237 | 67 | 2 |
| 6 | | 18 | 114 | 47 | 47 | 83 | 205 | 342 | 237 | 24 | 4 |
| 7 | | 18 | 92 | 63 | 53 | 84 | 205 | 365 | 212 | 24 | 3 |
| 8 | | 114 | 74 | 47 | 53 | 92 | 228 | 365 | 137 | 32 | 2 |
| 9 | | 74 | 60 | 47 | 53 | 92 | 228 | 362 | 162 | 32 | 2 |
| 10 | | 47 | 60 | 47 | 53 | 92 | 251 | 387 | 162 | 28 | 2 |
| 11 | | 36 | 46 | 36 | 60 | 114 | 228 | 387 | 113 | 32 | 2 |
| 12 | | 26 | 47 | 36 | 60 | 114 | 228 | 362 | 113 | 32 | 2 |
| 13 | | 31 | 47 | 36 | 60 | 114 | 228 | 362 | 113 | 32 | 2 |
| 14 | | 26 | 47 | 36 | 60 | 114 | 237 | 362 | 113 | 28 | 2 |
| 15 | | 26 | 36 | 36 | 52 | 97 | 251 | 337 | 92 | 24 | 2 |
| 16 | | 26 | 36 | 36 | 60 | 137 | 274 | 312 | 92 | 24 | 2 |
| 17 | | 26 | 36 | 36 | 60 | 183 | 296 | 262 | 113 | 24 | 1 |
| 18 | | 22 | 36 | 36 | 60 | 319 | 319 | 262 | 113 | 24 | 1 |
| 19 | | 36 | 36 | 36 | 60 | 410 | 342 | 287 | 92 | 24 | 1 |
| 20 | 12 | 235 | 36 | 36 | 57 | 365 | 365 | 212 | 113 | 24 | 1 |
| 21 | 12 | 410 | 26 | 36 | 60 | 342 | 376 | 387 | 113 | 20 | 1 |
| 22 | 12 | 319 | 26 | 30 | 60 | 314 | 410 | 387 | 92 | 24 | 1 |
| 23 | 12 | 251 | 26 | 36 | 60 | 296 | 410 | 387 | 92 | 24 | 1 |
| 24 | 7 | 296 | 26 | 47 | 60 | 274 | 432 | 337 | 92 | 24 | 1 |
| 25 | 3 | 387 | 26 | 47 | 74 | 251 | 432 | 362 | 75 | 24 | 1 |
| 26 | 8 | 183 | 31 | 60 | 60 | 251 | 455 | 312 | 75 | 15 | 0 |
| 27 | 7 | 114 | 36 | 60 | 60 | 205 | 478 | 337 | 75 | 12 | 0 |
| 28 | 7 | 103 | 36 | 60 | 68 | 183 | 478 | 312 | 60 | 12 | 0 |
| 29 | 7 | 92 | 36 | 47 | | 160 | 410 | 290 | 67 | 10 | 0 |
| 30 | 7 | 92 | 36 | 47 | | 137 | 387 | 287 | 67 | 10 | 0 |
| 31 | 7 | | [a] 55 | 45 | | 132 | | 287 | | 8 | 0 |

[a] Interpolated by engineers of the United States Geological Survey.

*Monthly discharge of Little Truckee River near Truckee, Cal., for [illegible].*

[Drainage area, 33.2 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| October 20-31 | 12 | 3 | 8.4 | 0.253 | 0.11 | [illegible] |
| November | 410 | 12 | [illegible] | 3.10 | 3.46 | 6,130 |
| December | 319 | 26 | 76.5 | 2.31 | 2.66 | 4,700 |
| January | 74 | 30 | 46.9 | 1.42 | 1.63 | 2,880 |
| February | 74 | 47 | 56.6 | 1.71 | 1.78 | 3,140 |
| March | 410 | 74 | 172 | 5.18 | 5.97 | 10,600 |
| April | 479 | 205 | 306 | 9.22 | 10.29 | 18,200 |
| May | 367 | 212 | 332 | 10.00 | 11.53 | 20,400 |
| June | 257 | 60 | 136 | 4.10 | 4.57 | 8,090 |
| July | 75 | 5 | 29.9 | .901 | 1.04 | 1,840 |
| August | 4 | 0 | 1.5 | .045 | .05 | 92 |
| The period | | | | | | 76,300 |

NOTE.—Monthly values computed by engineers of the United States Geological Survey.

## LITTLE TRUCKEE RIVER AT STARR, CAL.

This station, which is located at Starr, Cal., about 5 miles north of Boca, the nearest post office, was established June 25, 1903, at Bruhn's mill, or Pine station, on the Boca & Loyalton Railroad, 2 miles below Starr, was removed to its present site on January 1, 1908, and was discontinued October 22, 1910. The flow is practically the same at both places.

The station is below all tributaries except Dry Creek.

A new inclined gage was established August 3, 1909, with a datum 1 foot lower than that of the original gage. The creek freezes during parts of the winter.

Discharge measurements are made from a cable and car.

*Discharge measurements of Little Truckee River at Pine station, Cal., in 1903-1907.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-feet.* | 1905. | | *Feet.* | *Sec.-feet.* |
| July 17 | G. B. Lorenz | 1.20 | 50 | May 27 | W. A. Wolf | 2.05 | 366 |
| 30 | ....do | 1.00 | 29 | June 7 | ....do | 2.00 | 343 |
| Aug. 14 | ....do | .84 | 19 | 23 | ....do | 1.36 | 138 |
| Oct. 9 | ....do | .80 | 20 | July 8 | ....do | 1.12 | 98 |
| | | | | 24 | ....do | 1.03 | 81 |
| 1904. | | | | | | | |
| May 27 | W. A. Wolf | 3.10 | 971 | 1906. | | | |
| June 12 | ....do | 2.90 | 757 | May 30 | M. B. Kennedy | 2.35 | 545 |
| 21 | ....do | 2.50 | 617 | June 18 | ....do | 2.90 | 822 |
| July 5 | ....do | 1.88 | 321 | July 7 | ....do | 2.80 | 888 |
| 16 | ....do | 1.60 | 185 | Aug. 2 | ....do | 1.30 | 153 |
| Aug. 12 | ....do | .85 | 48 | | | | |
| Sept. 1 | ....do | .75 | 42 | 1907. | | | |
| | | | | June 3 | E. A. Porter | 3.20 | 1,010 |
| 1905. | | | | July 5 | ....do | 2.30 | 789 |
| Apr. 16 | W. A. Wolf | 1.85 | 280 | 27 | ....do | 1.70 | 306 |
| May 11 | ....do | 1.80 | 274 | Aug. 21 | ....do | .95 | 126 |

*Discharge measurements of Little Truckee River at Starr, Cal., in 1908–1910.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1908. | | *Feet.* | *Sec-feet.* | 1909. | | *Feet.* | *Sec-feet.* |
| June 18 | E. A. Porter | 1.80 | 292 | Sept. 13 | F. C. Schafer | 0.85 | 22 |
| July 9 | M. B. Kennedy | 1.20 | 126 | | | | |
| Oct. 17 | E. A. Porter | .80 | 56 | 1910. | | | |
| | | | | Mar. 24 | F. C. Schafer | 2.60 | 519 |
| 1909. | | | | Aug. 27 | .....do | .70 | 13 |
| May 20 | L. J. Towne | 3.20 | 856 | Sept. 22 | T. W. Norcross | .77 | 20 |
| July 9 | .....do | 2.05 | 254 | Dec. 15 | D. S. Stuver | 1.33 | 81.8 |
| Aug. 3 | .....do | 1.28 | 63 | | | | |

NOTE.—Beginning May 20, 1909, gage heights refer to a new gage installed Aug. 3, 1909.

*Daily gage height, in feet, of Little Truckee River at Pine station, Cal., for 1903–1907.*

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1903. | | | | | 1903. | | | | |
| 1 | | 2.15 | 1.00 | 0.79 | 16 | | 1.38 | 0.84 | 0.82 |
| 2 | | 2.15 | .99 | .79 | 17 | | 1.25 | .82 | .81 |
| 3 | | 2.10 | .95 | .76 | 18 | | 1.25 | .79 | .80 |
| 4 | | 2.10 | .95 | .76 | 19 | | 1.18 | .79 | .80 |
| 5 | | 2.10 | .95 | .74 | 20 | | 1.15 | .81 | .80 |
| 6 | | 2.10 | .95 | .76 | 21 | | 1.05 | .81 | |
| 7 | | 2.00 | .95 | .78 | 22 | | 1.05 | .82 | |
| 8 | | 1.60 | .94 | .79 | 23 | | 1.05 | .79 | |
| 9 | | 1.59 | .89 | .78 | 24 | | 1.10 | .79 | |
| 10 | | 1.55 | .94 | .79 | 25 | 2.05 | 1.05 | .81 | |
| 11 | | 1.48 | .91 | .79 | 26 | 2.05 | 1.09 | .79 | |
| 12 | | 1.42 | .91 | .79 | 27 | 2.15 | 1.08 | .79 | |
| 13 | | 1.45 | .92 | .76 | 28 | 2.10 | 1.02 | .81 | |
| 14 | | 1.42 | .91 | .82 | 29 | 2.10 | 1.04 | .79 | |
| 15 | | 1.41 | .85 | .86 | 30 | 2.10 | 1.02 | .79 | |
| | | | | | 31 | | 1.02 | .81 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | | |
| 1 | | 0.93 | 1.49 | 1.12 | 1.44 | 2.50 | 2.60 | 2.46 | 2.94 | 2.16 | 1.04 | 0.65 |
| 2 | | .93 | 1.46 | 1.12 | 1.40 | 2.80 | 2.70 | 2.48 | 2.92 | 2.08 | 1.06 | .65 |
| 3 | | .93 | 1.40 | 1.25 | 1.40 | 2.82 | 2.66 | 2.55 | 3.06 | 2.04 | 1.03 | .63 |
| 4 | | .96 | 1.32 | 1.30 | 1.45 | 2.85 | 2.72 | 2.76 | 2.98 | 1.96 | 1.02 | .63 |
| 5 | | 1.06 | 1.32 | 1.40 | 1.37 | 2.72 | 2.82 | 2.94 | 2.99 | 1.88 | 1.00 | .63 |
| 6 | | 1.03 | 1.32 | 1.38 | 1.42 | 2.75 | 2.92 | 3.16 | 3.06 | 1.90 | .99 | .63 |
| 7 | | 1.03 | 1.30 | 1.40 | 1.45 | 2.90 | 3.09 | 3.20 | 3.05 | 1.92 | .98 | .62 |
| 8 | | 1.03 | 1.30 | 1.50 | 1.53 | 3.10 | 3.23 | 3.30 | 2.86 | 1.88 | .95 | .60 |
| 9 | | .94 | 1.35 | 1.45 | 1.60 | 2.82 | 3.49 | 3.32 | 2.85 | 1.80 | .93 | .60 |
| 10 | | 1.00 | 1.30 | 1.18 | 1.60 | 2.75 | 3.64 | 3.46 | 2.84 | 1.76 | .92 | .60 |
| 11 | | 1.00 | 1.31 | 1.28 | 1.60 | 2.45 | 3.84 | 3.44 | 2.86 | 1.64 | .85 | .60 |
| 12 | | 1.42 | 1.37 | 1.30 | 1.50 | 2.32 | 4.07 | 3.60 | 2.78 | 1.60 | .83 | .60 |
| 13 | | 2.18 | 1.30 | 1.25 | 1.40 | 2.29 | 4.48 | 3.75 | 2.80 | 1.56 | .82 | .60 |
| 14 | | 2.75 | 1.28 | 1.32 | 1.54 | 2.28 | 4.56 | 3.64 | 2.84 | 1.59 | .80 | .60 |
| 15 | | 2.25 | 1.26 | 1.48 | 1.90 | 2.25 | 4.32 | 3.64 | 2.75 | 1.56 | .83 | .62 |
| 16 | | 1.82 | 1.28 | 1.42 | 2.42 | 2.18 | 3.95 | 3.60 | 2.72 | 1.62 | .80 | .63 |
| 17 | | 1.69 | 1.27 | 1.42 | 2.58 | 2.35 | 3.74 | 3.56 | 2.65 | 1.56 | .80 | .63 |
| 18 | | 1.56 | 1.25 | 1.36 | 2.54 | 2.95 | 3.86 | 3.38 | 2.60 | 1.52 | .80 | .66 |
| 19 | | 1.50 | 1.18 | 1.40 | 2.56 | 3.55 | 3.72 | 3.12 | 2.50 | 1.48 | .78 | .63 |
| 20 | | 1.86 | 1.25 | 1.52 | 2.28 | 3.65 | 3.15 | 3.08 | 2.44 | 1.42 | .76 | .63 |
| 21 | | 2.54 | 1.22 | 1.48 | 2.18 | 3.35 | 2.95 | 3.22 | 2.45 | 1.39 | .73 | .60 |
| 22 | | 2.58 | 1.16 | 1.56 | 2.75 | 3.06 | 2.80 | 3.48 | 2.46 | 1.38 | .70 | .68 |
| 23 | | 2.45 | 1.16 | 1.48 | 3.25 | 2.82 | 2.60 | 3.62 | 2.48 | 1.32 | .70 | .82 |
| 24 | | 2.25 | 1.22 | 1.48 | 3.75 | 2.60 | 2.55 | 3.73 | 2.39 | 1.32 | .79 | 1.08 |
| 25 | 1.20 | 1.99 | 1.26 | 1.42 | 3.65 | 2.49 | 2.59 | 3.82 | 2.29 | 1.33 | .84 | .95 |
| 26 | 1.20 | 1.82 | 1.28 | 1.39 | 3.35 | 2.45 | 2.58 | 3.32 | 2.20 | 1.26 | .80 | .89 |
| 27 | 1.18 | 1.68 | 1.28 | 1.40 | 2.90 | 2.50 | 2.44 | 3.08 | 2.22 | 1.22 | .74 | .84 |
| 28 | 1.12 | 1.64 | 1.30 | 1.39 | 2.62 | 3.08 | 2.34 | 3.02 | 2.26 | 1.18 | .72 | .80 |
| 29 | 1.00 | 1.56 | 1.26 | 1.38 | 2.60 | 3.14 | 2.35 | 3.06 | 2.26 | 1.13 | .69 | .80 |
| 30 | .98 | 1.52 | 1.29 | 1.40 | | 2.89 | 2.45 | 3.10 | 2.22 | 1.10 | .68 | .82 |
| 31 | .95 | | 1.25 | 1.38 | | 2.76 | | 3.04 | | 1.06 | .66 | |

*Daily gage height, in feet, of Little Truckee River at [illegible] station, [illegible], for 1904–1907—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 1 | 1.02 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | .94 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | .92 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | .95 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | .94 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | .95 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 1.04 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | .84 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | 2.34 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | 2.16 | [illegible] | [illegible] | [illegible] | .84 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | 1.04 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | .84 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | 1.14 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | ...... | [illegible] | [illegible] | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... |
| **1905–6.** | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | ...... | [illegible] | [illegible] | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... |
| **1906–7.** | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | 1.45 | 1.45 | 1.35 | 2.1 | [illegible] | [illegible] | [illegible] | 1.3 | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | 1.45 | [illegible] | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | 1.45 | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | 1.45 | [illegible] | 1.35 | 2.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | .9 | [illegible] | 1.35 | 2.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | .75 | 1.0 | [illegible] | 1.35 | [illegible] | [illegible] | [illegible] | [illegible] | 1.3 | [illegible] |

*Daily gage height, in feet, of Little Truckee River at Pine station, Cal., for 1903–1907*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | | | | | | | |
| 6 | 0.68 | 0.96 | 0.92 | 1.25 | 1.8 | 1.35 | 2.05 | 2.85 | 3.1 | 2.4 | 1.25 | 0.85 |
| 7 | .68 | .92 | .92 | 1.4 | 1.8 | 1.3 | 2.15 | 2.8 | 3.05 | 2.35 | 1.3 | .9 |
| 8 | .68 | .90 | .88 | 1.25 | 1.7 | 1.3 | 2.3 | 2.8 | 2.75 | 2.3 | 1.25 | .9 |
| 9 | .65 | .88 | .92 | 1.55 | 1.6 | 1.3 | 2.5 | 2.9 | 2.7 | 2.25 | 1.25 | .8 |
| 10 | .65 | .89 | .98 | 1.5 | 1.5 | 1.25 | 2.9 | 3.15 | 2.75 | 2.15 | 1.2 | .8 |
| 11 | .65 | .89 | .68 | 1.5 | 1.55 | 1.25 | 3.1 | 3.3 | 3.25 | 2.05 | 1.15 | .8 |
| 12 | .66 | .88 | .90 | 1.4 | 1.55 | 1.2 | 3.25 | 3.1 | 2.85 | 2.1 | 1.1 | .75 |
| 13 | .65 | .88 | 1.29 | 1.5 | 1.5 | 1.35 | 3.4 | 2.8 | 2.6 | 2.05 | 1.1 | .75 |
| 14 | .65 | .88 | 1.32 | 1.65 | 1.5 | 1.2 | 3.7 | 2.7 | 2.3 | 2.15 | 1.05 | .7 |
| 15 | .65 | .88 | 1.26 | 1.65 | 1.5 | 1.25 | 3.55 | 2.8 | 2.2 | 2.05 | 1.05 | .7 |
| 16 | .65 | .90 | 1.24 | 1.8 | 1.5 | 1.3 | 3.3 | 2.95 | 2.1 | 2.0 | 1.0 | .7 |
| 17 | .65 | .89 | 1.38 | 1.9 | 1.45 | 2.35 | 3.35 | 3.05 | 2.1 | 1.95 | 1.0 | .7 |
| 18 | .65 | .88 | 1.24 | 1.8 | 1.45 | 4.05 | 3.5 | 3.15 | 2.2 | 1.9 | 1.0 | .7 |
| 19 | .66 | .75 | 1.16 | 1.75 | 1.45 | 3.65 | 3.6 | 3.4 | 2.25 | 1.95 | .95 | .7 |
| 20 | .66 | .88 | 1.05 | 1.75 | 1.5 | 3.4 | 3.5 | 3.3 | 2.35 | 1.9 | .9 | .7 |
| 21 | .92 | .82 | 1.10 | 1.7 | 1.5 | 2.95 | 3.4 | 3.0 | 2.5 | 1.85 | .9 | .7 |
| 22 | .96 | .83 | 1.12 | 1.6 | 1.55 | 2.7 | 3.5 | 2.95 | 2.7 | 1.65 | .9 | .7 |
| 23 | 1.00 | .85 | 1.05 | 1.55 | 1.5 | 2.35 | 3.65 | 2.75 | 2.6 | 1.65 | .9 | .65 |
| 24 | .95 | .85 | 1.03 | 1.6 | 1.5 | 2.3 | 3.65 | 2.7 | 2.5 | 1.65 | .9 | .65 |
| 25 | .94 | .86 | 1.16 | 1.55 | 1.55 | 2.35 | 3.65 | 2.75 | 2.25 | 1.85 | .85 | .65 |
| 26 | .90 | .83 | 1.40 | 1.45 | 1.5 | 2.25 | 3.6 | 2.75 | 2.3 | 1.7 | .85 | .65 |
| 27 | .86 | .88 | 1.25 | 1.4 | 1.35 | 2.15 | 3.55 | 2.75 | 2.4 | 1.75 | .85 | .65 |
| 28 | .82 | .84 | 1.18 | 1.5 | 1.35 | 2.1 | 3.45 | 2.85 | 2.65 | 1.8 | .85 | .65 |
| 29 | .78 | .90 | 1.02 | 1.45 | ...... | 1.95 | 3.35 | 2.9 | 2.55 | 1.85 | .85 | .7 |
| 30 | .78 | .80 | .99 | 1.4 | ...... | 1.95 | 3.3 | 3.05 | 2.55 | 1.75 | .8 | .7 |
| 31 | .79 | ...... | 1.21 | 1.4 | ...... | 2.0 | ...... | 3.15 | ...... | 1.6 | .8 | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|
| 1907. | | | | 1907. | | | |
| 1 | 0.7 | 0.95 | 0.7 | 16 | 0.7 | 0.7 | 1.0 |
| 2 | .7 | .9 | .75 | 17 | .7 | ...... | .9 |
| 3 | .7 | .9 | .75 | 18 | .7 | ...... | .95 |
| 4 | .7 | .9 | .7 | 19 | .7 | ...... | 1.0 |
| 5 | .7 | .85 | .7 | 20 | .75 | ...... | 1.05 |
| 6 | .65 | .85 | .75 | 21 | .75 | ...... | .9 |
| 7 | .8 | .85 | .85 | 22 | .75 | ...... | .85 |
| 8 | .8 | .8 | .95 | 23 | .7 | ...... | .9 |
| 9 | .75 | .8 | 1.0 | 24 | .8 | ...... | .95 |
| 10 | .75 | .75 | 1.0 | 25 | .8 | ...... | .8 |
| 11 | .75 | .7 | .95 | 26 | .8 | ...... | 1.0 |
| 12 | .7 | .7 | 1.0 | 27 | .9 | ...... | 1.5 |
| 13 | .7 | .7 | .9 | 28 | .85 | ...... | 1.1 |
| 14 | .7 | .7 | .8 | 29 | .8 | ...... | .85 |
| 15 | .7 | .7 | 1.0 | 30 | .9 | ...... | .95 |
| | | | | 31 | 1.0 | ...... | .9 |

*Daily gage height, in feet, of Little Truckee River at Starr, Cal., for 1908–1910.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | | | | | | |
| 1 | 1.2 | 0.9 | 0.8 | 1.5 | 2.1 | 1.9 | 1.45 | 0.6 | 0.45 |
| 2 | 1.2 | 1.0 | .9 | 1.6 | 2.4 | 1.9 | 1.35 | .65 | .45 |
| 3 | 1.15 | .9 | .9 | 1.6 | 2.0 | 1.8 | 1.35 | .65 | .4 |
| 4 | 1.05 | 1.0 | 1.0 | 1.85 | 1.85 | 1.7 | 1.3 | .6 | .4 |
| 5 | 1.0 | 1.0 | .95 | 1.95 | 1.8 | 1.75 | 1.3 | .6 | .4 |
| 6 | 1.0 | .95 | 1.0 | 1.8 | 1.95 | 1.85 | 1.25 | .6 | .45 |
| 7 | 1.0 | .9 | 1.0 | 1.7 | 2.1 | 1.95 | 1.2 | .55 | .45 |
| 8 | 1.05 | .95 | .95 | 1.85 | 2.0 | 2.0 | 1.2 | .55 | .5 |
| 9 | 1.0 | .9 | 1.0 | 1.9 | 1.85 | 2.0 | 1.2 | .6 | .45 |
| 10 | 1.15 | .9 | 1.0 | 2.0 | 1.8 | 2.05 | 1.05 | .55 | .45 |
| 11 | 1.3 | .85 | 1.0 | 2.05 | 1.75 | 2.05 | 1.0 | .55 | .45 |
| 12 | 1.3 | .75 | 1.0 | 2.15 | 1.8 | 2.0 | 1.1 | .6 | .5 |
| 13 | 1.3 | .75 | 1.0 | 2.25 | 1.7 | 2.2 | 1.0 | .7 | .5 |
| 14 | 1.3 | .8 | 1.0 | 2.35 | 1.75 | 2.1 | .95 | .7 | .5 |
| 15 | 1.25 | .8 | 1.2 | 2.35 | 1.7 | 2.0 | .9 | .7 | .5 |

*Daily gage height, in feet, of Little Truckee River at Starr, Cal., for 1908–1910*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1908.** | | | | | | | | | |
| 16 | 1.15 | 1.0 | 1.2 | 2.25 | 1.8 | 1.95 | 0.9 | 0.6 | 0.5 |
| 17 | 1.15 | .9 | 1.45 | 2.05 | 1.7 | 1.9 | .85 | .55 | .55 |
| 18 | 1.2 | .8 | 1.55 | 2.1 | 1.6 | 1.75 | .8 | .5 | .55 |
| 19 | 1.1 | .9 | 1.6 | 2.2 | 1.73 | 1.75 | .8 | .5 | .55 |
| 20 | 1.2 | .9 | 1.6 | 2.4 | 1.6 | 1.75 | .8 | .5 | .55 |
| 21 | .9 | .9 | 1.65 | 2.4 | 1.65 | 1.7 | .73 | .45 | .5 |
| 22 | .9 | .8 | 1.65 | 2.3 | 1.7 | 1.6 | .7 | .45 | .5 |
| 23 | .9 | .8 | 1.7 | 2.1 | 1.8 | 1.5 | .7 | .45 | .5 |
| 24 | .9 | .85 | 1.8 | 2.0 | 1.96 | 1.5 | .7 | .45 | .6 |
| 25 | 1.05 | .85 | 1.85 | 1.9 | 2.1 | 1.65 | .65 | .45 | .55 |
| 26 | 1.05 | .9 | 1.8 | 1.95 | 2.2 | 1.6 | .65 | .45 | .55 |
| 27 | .9 | .9 | 1.7 | 2.0 | 2.0 | 1.5 | .65 | .4 | .55 |
| 28 | .85 | .9 | 1.7 | 2.06 | 2.0 | 1.45 | .65 | .45 | .55 |
| 29 | .8 | .8 | 1.8 | 2.1 | 2.05 | 1.4 | .6 | .45 | .55 |
| 30 | .9 | ...... | 1.6 | 2.1 | 2.05 | 1.55 | .6 | .45 | .55 |
| 31 | .95 | ...... | 1.6 | ...... | 1.95 | ...... | .6 | .45 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1908–9.** | | | | | | | | | | | | |
| 1 | 0.55 | 0.7 | 0.75 | 2. | 1.95 | 1.6 | 1.8 | 3.95 | 3.4 | 2.8 | 1.4 | 0.9 |
| 2 | .55 | .7 | .8 | 2.35 | 1.95 | 1.55 | 1.95 | 3.7 | 3.73 | 2.73 | 1.3 | .85 |
| 3 | .55 | .7 | .75 | 2.35 | 1.8 | 1.6 | 2.1 | 3.4 | 3.85 | 2.7 | 1.3 | .9 |
| 4 | .6 | .7 | .7 | 2.3 | 1.75 | 1.6 | 2.2 | 3.75 | 3.9 | 2.6 | 1.25 | .9 |
| 5 | .55 | .7 | .65 | 2.85 | 1.7 | 1.6 | 2.15 | 3.85 | 3.9 | 2.4 | 1.2 | 1.0 |
| 6 | .55 | .7 | .65 | 3.05 | 1.7 | 1.6 | 2.15 | 3.9 | 3.7 | 2.25 | 1.15 | .95 |
| 7 | .55 | .7 | .55 | 2.8 | 1.6 | 1.6 | 2.2 | 4.0 | 3.6 | 2.15 | 1.1 | .9 |
| 8 | .55 | .65 | .7 | 2.35 | 1.6 | 1.6 | 2.25 | 3.95 | 3.5 | 2.1 | 2.3 | .9 |
| 9 | .55 | .65 | .7 | 2.6 | 1.7 | 1.6 | 2.4 | 3.73 | 3.4 | 2.05 | 2.15 | .85 |
| 10 | .55 | .7 | .55 | 3.1 | 1.7 | 1.6 | 2.55 | 3.6 | 3.3 | 2.05 | 1.8 | .85 |
| 11 | .55 | .65 | .75 | 4.0 | 1.7 | 1.6 | 2.5 | 3.6 | 3.3 | 2.05 | 1.8 | .8 |
| 12 | .55 | .65 | .8 | 4.1 | 1.75 | 1.55 | 2.6 | 3.15 | 3.3 | 2.05 | 1.8 | .85 |
| 13 | .55 | .65 | .75 | 4.0 | 1.7 | 1.5 | 2.8 | 3.2 | 3.3 | 2.15 | 1.5 | .85 |
| 14 | .55 | .65 | .65 | 4.8 | 1.7 | 1.5 | 3.2 | 3.15 | 3.1 | 2.1 | 1.4 | .95 |
| 15 | 1.25 | .6 | .70 | 4.8 | 1.65 | 1.6 | 3.3 | 3.3 | 3.2 | 2.0 | 1.5 | .85 |
| 16 | 1.0 | .6 | .85 | 4.8 | 1.65 | 1.65 | 3.45 | 3.15 | 3.15 | 2.0 | 1.0 | .85 |
| 17 | .8 | .55 | .9 | 4.35 | 1.8 | 1.8 | 4.0 | 3.15 | 3.15 | 1.95 | 1.0 | .85 |
| 18 | .7 | .55 | .9 | 4.0 | 1.75 | 1.85 | 3.8 | 3.15 | 3.2 | 1.8 | 1.0 | .85 |
| 19 | .7 | .55 | .95 | 3.2 | 1.8 | 1.9 | 3.85 | 3.2 | 3.05 | 1.65 | .95 | .85 |
| 20 | .7 | .6 | .95 | 2.9 | 1.75 | 1.85 | 3.5 | 3.3 | 2.8 | 1.55 | 1.0 | .85 |
| 21 | .75 | .75 | .95 | 2.8 | 1.7 | 1.9 | 3.5 | 3.3 | 2.8 | 1.55 | .95 | .85 |
| 22 | .7 | .75 | 1.0 | 2.45 | 1.65 | 1.8 | 3.5 | 3.0 | 2.9 | 1.5 | .95 | .85 |
| 23 | .75 | .75 | 1.05 | 2.2 | 1.75 | 1.75 | 3.3 | 2.85 | 3.05 | 1.5 | 1.1 | .95 |
| 24 | .75 | .6 | 1.05 | 2.2 | 1.65 | 1.75 | 3.35 | 2.7 | 3.2 | 1.55 | .95 | .85 |
| 25 | .75 | .75 | .9 | 2.15 | 1.65 | 1.7 | 3.35 | 2.75 | 3.1 | 1.65 | .9 | .85 |
| 26 | .7 | .7 | .95 | 2.1 | 1.65 | 1.7 | 3.55 | 2.95 | 2.95 | 1.5 | .9 | .85 |
| 27 | .8 | .85 | .9 | 2.8 | 1.65 | 1.7 | 4.1 | 3.1 | 2.95 | 1.4 | .9 | .9 |
| 28 | .7 | .85 | .9 | 1.95 | 1.6 | 1.7 | 3.95 | 3.3 | 2.9 | 1.4 | .9 | .9 |
| 29 | .7 | .85 | .85 | 2.0 | ...... | 1.7 | 3.8 | 2.95 | 2.9 | 1.35 | .85 | .95 |
| 30 | .7 | .8 | 1.05 | 1.9 | ...... | 1.7 | 3.75 | 2.85 | 2.8 | 1.35 | .85 | .95 |
| 31 | .7 | ...... | 1.05 | 1.9 | ...... | 1.7 | ...... | 3.05 | ...... | 1.3 | .9 | ...... |
| **1909–10.** | | | | | | | | | | | | |
| 1 | .95 | 1.05 | 2.2 | 2.25 | 2.45 | 1.9 | 2.85 | 2.85 | 2.5 | 1.3 | .7 | .65 |
| 2 | 1.0 | 1.1 | 2.2 | 2.2 | 2.35 | 1.85 | 2.95 | 2.75 | 2.55 | 1.2 | .75 | .65 |
| 3 | 1.05 | 1.05 | 1.6 | 2.1 | 2.5 | 1.95 | 2.9 | 2.75 | 2.45 | 1.2 | .7 | .7 |
| 4 | 1.05 | 1.0 | 2.1 | 2.1 | 2.65 | 2.0 | 2.8 | 2.6 | 2.4 | 1.2 | .75 | .7 |
| 5 | 1.0 | 1.0 | 2.9 | 2.05 | 2.95 | 2.1 | 2.75 | 2.45 | 2.2 | 1.15 | .7 | .7 |
| 6 | .95 | 1.05 | 2.4 | 2.3 | 3.1 | 2.1 | 2.95 | 2.45 | 2.05 | 1.05 | .7 | .7 |
| 7 | .95 | 1.1 | 1.9 | 2.2 | 3.2 | 2.2 | 2.95 | 2.55 | 2.0 | 1.05 | .7 | .65 |
| 8 | .95 | 1.15 | 1.9 | 2.1 | 2.95 | 2.3 | 3.05 | 2.75 | 1.95 | 1.0 | .7 | .7 |
| 9 | .9 | 1.55 | 1.9 | 1.95 | 3.1 | 2.3 | 3.1 | 2.9 | 1.85 | 1.0 | .7 | .7 |
| 10 | .9 | 1.4 | 2.05 | 1.95 | 2.75 | 2.4 | 3.15 | 3.0 | 1.85 | 1.0 | .7 | .7 |
| 11 | .9 | 1.5 | 1.95 | 1.95 | 2.65 | 2.5 | 3.05 | 3.0 | 1.9 | 1.0 | .75 | .65 |
| 12 | .95 | 1.15 | 1.85 | 1.95 | 2.7 | 2.55 | 2.95 | 3.0 | 1.8 | .95 | .75 | .7 |
| 13 | .9 | 1.15 | 1.8 | 2.05 | 2.56 | 2.6 | 3.0 | 2.95 | 1.65 | .95 | .7 | .7 |
| 14 | .9 | 1.15 | 1.75 | 2.05 | 2.5 | 2.7 | 2.9 | 2.9 | 1.7 | .95 | .7 | .75 |
| 15 | .9 | 1.1 | 1.7 | 2.0 | 2.1 | 2.6 | 2.95 | 2.75 | 1.7 | .95 | .7 | .8 |

*Daily gage height, in feet, of Little Truckee River at Starr, Cal., for 1909–1910*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10 | | | | | | | | | | | | |
| 16 | .05 | .05 | .6 | 2.1 | 2.4 | 2.55 | 2.85 | 2.75 | .7 | 1.9 | 1.7 | [illegible]5 |
| 17 | [illegible] | [illegible] | .5 | 2.25 | 2.75 | 2.55 | [illegible] | 2.7 | .55 | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | 2.4 | 2.65 | [illegible] | [illegible] | 2.7 | .05 | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | .5 | .45 | 2.4 | 2.45 | 2.75 | 2.25 | 2.7 | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | 2.7 | [illegible] | 1.35 | 2.55 | 1.55 | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | .6 | 2.4 | 2.55 | .05 | 2 | 2.55 | 1.55 | .95 | [illegible] | [illegible] |
| 22 | 2 | .65 | [illegible] | 2.4 | [illegible] | 2.55 | 1.2 | 2.65 | .5 | .95 | [illegible] | [illegible] |
| 23 | [illegible] | 2.7 | .65 | 2.4 | 2.55 | 2.7 | 1.2 | 2.65 | 1.55 | .95 | .65 | [illegible] |
| 24 | [illegible] | 2.4 | [illegible] | 2.5 | 2.5 | 2.5 | 1.25 | 2.7 | .45 | .95 | .65 | [illegible] |
| 25 | [illegible] | 2.75 | [illegible] | 2.4 | 2.5 | 2.35 | 1.3 | 2.65 | 1.4 | [illegible] | .65 | [illegible] |
| 26 | [illegible] | 2.45 | [illegible] | 2.8 | 2.0 | 2.55 | 1.35 | 2.35 | 1.45 | .95 | .55 | [illegible] |
| 27 | [illegible] | 2.5 | .65 | 2.7 | 2.5 | 2.4 | 1.25 | 2.5 | 1.4 | [illegible] | .65 | [illegible] |
| 28 | [illegible] | .65 | [illegible] | 2.7 | 2.2 | 2.55 | 1.45 | 2.8 | 1.25 | [illegible] | .65 | [illegible] |
| 29 | .5 | [illegible] | .65 | 2.65 | [illegible] | 2.55 | 1.1 | 2.35 | 1.30 | .75 | .55 | [illegible] |
| 30 | .5 | .55 | .75 | 2.7 | [illegible] | 2.6 | 1.05 | 2.25 | 1.30 | [illegible] | [illegible] | [illegible] |
| 31 | 1.65 | [illegible] | 2.2 | 2.05 | ........ | 2.7 | ........ | 2.5 | ........ | .75 | .7 | ........ |

| Day. | Oct. | Day. | Oct. | Day. | Oct. |
|---|---|---|---|---|---|
| 1910. | | 1910. | | 1910. | |
| 1 | [illegible] | 11 | 1.85 | 21 | [illegible] |
| 2 | [illegible] | 12 | [illegible] | 22 | [illegible] |
| 3 | [illegible] | 13 | [illegible] | 23 | |
| 4 | [illegible] | 14 | [illegible] | 24 | |
| 5 | [illegible] | 15 | .85 | 25 | |
| 6 | [illegible] | 16 | .85 | 26 | |
| 7 | [illegible] | 17 | .85 | 27 | |
| 8 | [illegible] | 18 | .85 | 28 | |
| 9 | [illegible] | 19 | [illegible] | 29 | |
| 10 | [illegible] | 20 | [illegible] | 30 | |
| | | | | 31 | |

NOTE.—Beginning Jan. 1, 1909, gage heights refer to new gage installed Aug. 3, 1909.

*Rating tables for Little Truckee River at Pine station, Cal.*

**June 25 to December 31, 1908.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| [illegible] | 4 | [illegible] | [illegible] | 1.9 | 160 | 2.5 | 256 |
| [illegible] | [illegible] | 1.4 | [illegible] | 2.0 | 176 | 2.6 | 272 |
| [illegible] | 13 | [illegible] | [illegible] | 2.1 | 192 | 2.7 | 288 |
| [illegible] | 19 | [illegible] | 112 | 2.2 | 208 | 2.8 | 304 |
| [illegible] | 34 | [illegible] | 128 | 2.3 | 224 | | |
| 1.2 | 50 | [illegible] | 144 | 2.4 | 240 | | |

NOTE.—Table only approximate beyond 1.20 feet gage height and not well defined below 1 foot gage height.

**January 1 to December 31, 1909.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [illegible] | 31 | 1.70 | 240 | 2.80 | 761 | 3.90 | 1,385 |
| [illegible] | 37 | 1.80 | 273 | 2.90 | 815 | 4.00 | 1,445 |
| [illegible] | 45 | [illegible] | [illegible] | 3.00 | [illegible] | 4.10 | 1,510 |
| [illegible] | 53 | 2.00 | 361 | 3.10 | 923 | 4.20 | 1,575 |
| [illegible] | 64 | 2.10 | 407 | 3.20 | 979 | 4.30 | 1,640 |
| [illegible] | 79 | 2.20 | 455 | 3.30 | 1,034 | 4.40 | 1,705 |
| [illegible] | 98 | 2.30 | 504 | 3.40 | 1,090 | 4.50 | 1,770 |
| [illegible] | 120 | 2.40 | 554 | 3.50 | 1,148 | 4.60 | 1,835 |
| [illegible] | 145 | 2.50 | 604 | 3.60 | 1,205 | | |
| [illegible] | [illegible] | 2.60 | 658 | 3.70 | 1,265 | | |
| [illegible] | 205 | 2.70 | 708 | 3.80 | 1,325 | | |

NOTE.—Table applicable only for periods of open channel. It is based upon 7 discharge measurements made during 1909 and is well defined between gage heights 0.75 foot and 3.10 feet.

*Rating tables for Little Truckee River at Pine station, Cal.—Continued.*

**January 1 to December 31, 1905.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.60 | 35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| .70 | 45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| .80 | 55 | 1.40 | [illegible] | 2.00 | [illegible] | [illegible] | [illegible] |
| .90 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.00 | [illegible] | 1.60 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.10 | [illegible] | 1.70 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

NOTE.—Table is applicable only for periods of open channel. It is based on discharge measurements made during 1904-5, and is well defined between gage heights [illegible] feet and [illegible] feet.

**January 1, 1906, to April [illegible], 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.00 | [illegible] | 1.50 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.20 | [illegible] | 1.70 | [illegible] | [illegible] | [illegible] | | |
| 1.30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 1.40 | [illegible] | [illegible] | [illegible] | 2.40 | [illegible] | | |

NOTE.—Table is applicable only to open channel. It is based on discharge measurements made during 1904-5 and is well defined below gage height 2.[illegible] feet. [illegible]

**April [illegible], 1906, to June [illegible], 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.70 | 55 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| .80 | 67 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| .90 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.00 | 94 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.10 | [illegible] | 2.00 | [illegible] | [illegible] | [illegible] | | |
| 1.20 | [illegible] | 2.10 | [illegible] | [illegible] | [illegible] | | |
| 1.30 | [illegible] | 2.20 | [illegible] | [illegible] | [illegible] | | |
| 1.40 | [illegible] | 2.30 | [illegible] | [illegible] | [illegible] | | |
| 1.50 | [illegible] | 2.40 | [illegible] | [illegible] | [illegible] | | |

NOTE.—Table applicable only to open channel. It is based on 4 discharge measurements made during 1906 and the form of the 1905 curve, and is not well defined.

**June [illegible] to December 31, 1907.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.65 | 78 | 1.50 | [illegible] | 2.40 | [illegible] | [illegible] | 1,285 |
| .70 | 90 | 1.60 | [illegible] | 2.50 | [illegible] | [illegible] | [illegible] |
| .80 | [illegible] | 1.70 | [illegible] | 2.60 | [illegible] | [illegible] | [illegible] |
| .90 | 117 | 1.80 | [illegible] | 2.70 | [illegible] | [illegible] | [illegible] |
| 1.00 | 133 | 1.90 | [illegible] | [illegible] | [illegible] | 3.70 | [illegible] |
| 1.10 | 151 | 2.00 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.20 | 172 | 2.10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.30 | 196 | 2.20 | 525 | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.40 | [illegible] | 2.30 | [illegible] | 3.20 | 1,230 | | |

NOTE.—Table applicable only to open channel. It is based on 2 discharge measurements made during 1907 and the form of previous curves, and is well defined below gage height 2 feet.

**January 1 to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.40 | 14 | 1.00 | 83 | 1.60 | 221 | 2.20 | 473 |
| .50 | 22 | 1.10 | 100 | 1.70 | 255 | 2.30 | 523 |
| .60 | 31 | 1.20 | 120 | 1.80 | 292 | 2.40 | 573 |
| .70 | 42 | 1.30 | 141 | 1.90 | 331 | 2.50 | 625 |
| .80 | 55 | 1.40 | 165 | 2.00 | 376 | | |
| .90 | 68 | 1.50 | 192 | 2.10 | 423 | | |

NOTE.—Table applicable only to open channel. It is based on 3 discharge measurements made during 1908, and is well defined between gage heights 0.8 foot and 1.8 feet.

WATEF

height, in f

| | Oct. | N |
|---|---|---|
| | 1.05 | 1 |
| | 1.1 | 1 |
| | .9 | 1 |
| | 1.0 | [illegible] |
| | 1.1 | [illegible] |
| | 1.0 | [illegible] |
| | 1.2 | [illegible] |
| | 1.0 | [illegible] |
| | 1.0 | |
| | 1.0 | |
| | .9 | |
| | .9 | |
| | 1.0 | |
| | 1.05 | |
| | 1.05 | |
| | 1.05 | |

ay.

910.

Beginning Jan. 1.

*Rating ta*

| Gage height. | Dis-cha |
|---|---|
| *Feet.* | *Sec.-* |
| 0.7 | |
| .8 | |
| .9 | |
| 1.0 | |
| 1.1 | |
| 1.2 | |

Table only appro

| | |
|---|---|
| 0.60 | |
| .70 | |
| .80 | |
| .90 | |
| 1.00 | |
| 1.10 | |
| 1.20 | |
| 1.30 | |
| 1.40 | |
| 1.50 | |

ble

... the mouth of the ... established *January* ... established in 1903 ... It was ... 1, 1908, and ... 1911 ...

[illegible] relation between gage height and [illegible] is affected by ice.

[illegible] flow of the stream is [illegible] the small power plant [illegible] does not pass the gage. [illegible] is not very satisfactory. [illegible]

[illegible] heights are furnished [illegible]

[illegible] harge measurements made [illegible] Stone & Webster Engineer[illegible] rporation have been [illegible] y for publication.

*Discharge measurements of [illegible] River at [illegible]*

| [illegible] | [illegible] | [illegible] |
|---|---|---|
| | *Feet.* | *Sec.-ft.* |
| J. K. Stewart | [illegible] | [illegible] |
| Stone & Webster Engineering Corporation | [illegible] | [illegible] |
| J. K. Stewart | [illegible] | [illegible] |
| Stone & Webster Engineering Corporation | [illegible] | [illegible] |
| G. T. [illegible] | [illegible] | [illegible] |
| Stone & Webster Engineering Corporation | [illegible] | [illegible] |
| F. C. [illegible] | [illegible] | [illegible] |

*[illegible] gage height, in feet, of [illegible] River at [illegible]*

| Day. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | | | |
| | 1.65 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.85 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.65 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .75 |
| | 1.65 | 1.45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.1 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | .9 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | .75 | 1.45 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | .5 | 1.3 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | .5 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | .5 | 1.45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | .4 | 1.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | .45 | 1.25 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.4 | 1.3 | 1.85 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.4 | 1.2 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.4 | 1.25 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.25 | 1.2 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.3 | 1.2 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.05 | 1.15 | 1.65 | 3.4 | [illegible] | [illegible] | [illegible] | [illegible] | .9 |
| | 1.1 | 1.25 | 1.7 | [illegible] | [illegible] | [illegible] | 1.6 | [illegible] | [illegible] |
| | 1.1 | 1.2 | 1.85 | 4.0 | [illegible] | [illegible] | [illegible] | [illegible] | .9 |
| | 1.2 | 1.2 | 1.9 | 4.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | 1.15 | 1.15 | 2.0 | 4.7 | 3.4 | [illegible] | 1.75 | [illegible] | .85 |
| | 1.15 | 1.15 | 2.1 | 4.9 | 3.25 | 2.7 | 1.7 | .9 | |
| | 1.15 | 1.2 | 2.1 | 4.35 | 3.25 | 3.0 | 1.65 | .9 | |
| | 1.1 | 1.2 | 2.15 | 4.1 | 3.3 | 3.1 | 1.9 | .9 | |
| | 1.2 | | 2.2 | 4.1 | 3.3 | 2.9 | 1.7 | .9 | |
| | 1.5 | | 2.35 | 4.0 | 3.3 | 2.9 | 1.6 | .9 | |
| | 1.75 | | 2.5 | | 3.3 | | 1.6 | .85 | |

[illegible]

[illegible]

[illegible]

January 1 to December 31, [illegible].

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [illegible] | 31 | 1.[illegible]0 | 240 | 2.80 | 791 | 3.90 | 1,385 |
| [illegible] | 47 | 1.[illegible]0 | [illegible] | 2.90 | 815 | 4.00 | 1,445 |
| [illegible] | [illegible] | 1.[illegible]0 | [illegible] | 3.00 | 869 | 4.10 | 1,510 |
| [illegible] | [illegible] | 2.00 | [illegible] | 3.10 | 923 | 4.20 | 1,575 |
| 1.[illegible] | [illegible] | 2.10 | 407 | 3.20 | 978 | 4.30 | 1,640 |
| 1.[illegible] | [illegible] | 2.[illegible]0 | 455 | 3.30 | 1,034 | 4.40 | 1,705 |
| 1.[illegible] | [illegible] | 2.[illegible]0 | 504 | 3.40 | 1,090 | 4.50 | 1,770 |
| 1.[illegible] | [illegible] | 2.[illegible]0 | 554 | 3.50 | 1,146 | 4.60 | 1,835 |
| 1.[illegible] | [illegible] | 2.[illegible]0 | 604 | 3.60 | 1,205 | | |
| 1.[illegible] | [illegible] | 2.[illegible]0 | [illegible] | 3.70 | 1,265 | | |
| 1.[illegible] | [illegible] | 2.70 | [illegible] | 3.80 | 1,325 | | |

[illegible] for periods of open channel. It is based upon 7 discharge measurements [illegible] and is well defined between gage heights 0.75 foot and 3.10 feet.

*Rating tables for Little Truckee River at Pine station, Cal.—Continued.*

January 1 to December 31, [illegible].

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.60 | 35 | 1.20 | [illegible] | 1.80 | [illegible] | 2.40 | [illegible] |
| .70 | 45 | 1.30 | 125 | 1.90 | [illegible] | 2.50 | [illegible] |
| .80 | 55 | 1.40 | 148 | 2.00 | [illegible] | 2.60 | [illegible] |
| .90 | 66 | 1.50 | 174 | 2.10 | [illegible] | 2.70 | [illegible] |
| 1.00 | 78 | 1.60 | [illegible] | 2.20 | [illegible] | 2.80 | [illegible] |
| 1.10 | 91 | 1.70 | 235 | 2.20 | [illegible] | 2.90 | [illegible] |

NOTE.—Table is applicable only for periods of open channel. It is based on discharge measurements made during 1904-5, and is well defined between gage heights 1 foot and 2.1 feet.

January 1, [illegible], to April 14, [illegible].

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.00 | 78 | 1.50 | 174 | 2.00 | [illegible] | 2.50 | [illegible] |
| 1.10 | 91 | 1.60 | [illegible] | 2.10 | [illegible] | 2.60 | [illegible] |
| 1.20 | 107 | 1.70 | 235 | 2.20 | [illegible] | | |
| 1.30 | 126 | 1.80 | 270 | 2.30 | 483 | | |
| 1.40 | 148 | 1.90 | [illegible] | 2.40 | 531 | | |

NOTE.—Table is applicable only to open channel. It is based on discharge measurements made during 1904-5 and is well defined below gage height 2.1 feet. The table has been extended beyond these limits.

April [illegible], [illegible], to June [illegible], [illegible].

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.70 | 55 | 1.60 | [illegible] | 2.50 | 640 | 3.40 | 1,160 |
| .80 | 67 | 1.70 | 271 | 2.60 | 685 | 3.50 | 1,225 |
| .90 | 80 | 1.80 | [illegible] | 2.70 | 730 | 3.60 | 1,290 |
| 1.00 | 94 | 1.90 | 351 | 2.80 | [illegible] | 3.70 | 1,356 |
| 1.10 | 110 | 2.00 | [illegible] | 2.90 | [illegible] | | |
| 1.20 | 129 | 2.10 | 440 | 3.00 | 920 | | |
| 1.30 | 152 | 2.20 | [illegible] | 3.10 | 960 | | |
| 1.40 | 178 | 2.30 | 540 | 3.20 | 1,040 | | |
| 1.50 | 206 | 2.40 | [illegible] | 3.30 | 1,100 | | |

NOTE.—Table applicable only to open channel. It is based on 4 discharge measurements made during [illegible] and the form of the 1905 curve, and is not well defined.

June [illegible] to December 31, [illegible].

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.60 | 78 | 1.50 | 247 | 2.40 | 635 | 3.30 | 1,195 |
| .70 | 90 | 1.60 | 276 | 2.50 | 695 | 3.40 | 1,260 |
| .80 | 103 | 1.70 | 306 | 2.60 | 755 | 3.50 | 1,325 |
| .90 | 117 | 1.80 | 340 | 2.70 | 815 | 3.60 | 1,390 |
| 1.00 | 133 | 1.90 | 385 | 2.80 | 875 | 3.70 | 1,455 |
| 1.10 | 151 | 2.00 | 430 | 2.90 | 935 | 3.80 | 1,520 |
| 1.20 | 172 | 2.10 | 475 | 3.00 | 1,000 | 3.90 | 1,585 |
| 1.30 | 195 | 2.20 | 525 | 3.10 | 1,065 | 4.00 | 1,650 |
| 1.40 | 220 | 2.30 | 580 | 3.20 | 1,1■0 | | |

NOTE.—Table applicable only to open channel. It is based on 2 discharge measurements made during 1907 and the form of previous curves, and is well defined below gage height 2 feet.

January 1 to December 31, [illegible].

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.40 | 14 | 1.00 | 83 | 1.60 | 221 | 2.20 | 473 |
| .50 | 22 | 1.10 | 100 | 1.70 | 255 | 2.30 | 523 |
| .60 | 31 | 1.20 | 120 | 1.80 | 292 | 2.40 | 573 |
| .70 | 42 | 1.30 | 141 | 1.90 | 331 | 2.50 | 625 |
| .80 | 55 | 1.40 | 165 | 2.00 | 376 | | |
| .90 | 68 | 1.50 | 192 | 2.10 | 423 | | |

NOTE.—Table applicable only to open channel. It is based on 3 discharge measurements made during 1908, and is well defined between gage heights 0.8 foot and 1.8 feet.

*Daily discharge, in second-feet, of Little Truckee River at Starr, [illegible]*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909 | | | | | | | | | |
| 1 | 40 | 215 | 128 | 174 | 1,410 | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 40 | 215 | 118 | 215 | [illegible] | 1,130 | [illegible] | [illegible] | [illegible] |
| 3 | 40 | 174 | 128 | 234 | 860 | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 40 | 162 | 128 | 402 | 1,130 | 1,280 | [illegible] | [illegible] | [illegible] |
| 5 | 120 | 150 | 128 | 353 | 1,250 | 1,280 | 390 | [illegible] | [illegible] |
| 6 | 140 | 150 | 128 | 353 | 1,380 | 1,130 | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | 128 | 128 | 402 | 1,440 | 1,130 | 353 | [illegible] | [illegible] |
| 8 | 40 | 128 | 128 | 423 | 1,410 | 1,040 | 254 | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | 128 | 590 | 1,130 | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | 150 | 128 | 498 | 1,100 | [illegible] | [illegible] | 174 | [illegible] |
| 11 | 250 | 150 | 128 | 440 | 1,100 | [illegible] | [illegible] | 174 | [illegible] |
| 12 | 400 | 162 | 118 | 300 | 830 | 620 | [illegible] | 174 | [illegible] |
| 13 | 625 | 150 | 128 | 620 | 860 | 650 | 353 | [illegible] | [illegible] |
| 14 | 1,400 | 150 | 128 | 860 | 830 | 400 | 254 | 40 | [illegible] |
| 15 | 1,720 | 139 | 128 | 920 | 720 | 860 | 220 | [illegible] | 30 |
| 16 | 1,720 | 139 | 139 | 1,010 | 830 | 830 | 230 | [illegible] | 30 |
| 17 | 1,540 | 174 | 174 | 1,440 | 830 | 830 | 215 | [illegible] | [illegible] |
| 18 | 1,440 | 162 | 187 | 1,220 | 830 | [illegible] | 174 | [illegible] | 30 |
| 19 | [illegible] | 174 | 174 | 1,250 | [illegible] | [illegible] | 139 | [illegible] | 30 |
| 20 | [illegible] | 162 | 187 | 1,340 | 720 | [illegible] | 115 | [illegible] | 30 |
| 21 | [illegible] | 150 | 174 | 1,040 | 720 | 620 | 115 | [illegible] | 30 |
| 22 | [illegible] | 139 | 174 | 1,040 | 740 | [illegible] | 108 | [illegible] | 30 |
| 23 | [illegible] | 162 | 162 | 920 | 650 | [illegible] | 108 | [illegible] | 30 |
| 24 | [illegible] | [illegible] | 162 | 650 | 700 | [illegible] | 115 | [illegible] | 30 |
| 25 | 282 | 139 | 150 | 960 | 590 | 400 | 108 | 25 | 30 |
| 26 | 264 | 139 | 150 | 1,070 | 770 | 770 | 108 | 25 | 30 |
| 27 | 230 | [illegible] | 150 | 1,300 | 800 | 710 | [illegible] | 25 | 25 |
| 28 | 215 | 128 | 150 | 1,410 | 920 | 560 | [illegible] | 25 | 25 |
| 29 | 230 | ........ | 150 | 1,220 | 770 | 560 | 82 | 30 | 30 |
| 30 | 200 | ........ | 150 | 1,190 | 650 | 620 | 82 | 30 | 30 |
| 31 | 200 | ........ | 150 | ........ | 770 | ........ | 74 | 25 | ........ |

NOTE.—Daily discharge Jan. 1 to 14 estimated because of probable presence of ice. Discharges for the remainder of the year determined from a rating curve well defined between 230 and 1,340 second-feet.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | | |
| 1 | 30 | 42 | 302 | 342 | 433 | 211 | 641 | 641 | 457 | 72 | 13 | 11 | 19 |
| 2 | 38 | 48 | 302 | 321 | 586 | 196 | 698 | 586 | 482 | 58 | 16 | 11 | 19 |
| 3 | 42 | 42 | 128 | 281 | 457 | 228 | 669 | 586 | 433 | 58 | 13 | 13 | 19 |
| 4 | 42 | 36 | 264 | 281 | 533 | 244 | 613 | 507 | 409 | 55 | 16 | 13 | 19 |
| 5 | 36 | 36 | 660 | 262 | 698 | 281 | 586 | 433 | 321 | 52 | 13 | 13 | 19 |
| 6 | 30 | 42 | 390 | 364 | 790 | 281 | 698 | 433 | 262 | 41 | 13 | 13 | 19 |
| 7 | 30 | 48 | 300 | 321 | 655 | 321 | 698 | 482 | 244 | 41 | 13 | 11 | 19 |
| 8 | 30 | 54 | 200 | 281 | 698 | 364 | 759 | 586 | 228 | 36 | 13 | 13 | 19 |
| 9 | 25 | 118 | 200 | 228 | 790 | 364 | 790 | 669 | 196 | 36 | 13 | 13 | 19 |
| 10 | 25 | 90 | 247 | 228 | 586 | 409 | 822 | 728 | 196 | 36 | 13 | 13 | 19 |
| 11 | 25 | 108 | 215 | 228 | 533 | 457 | 759 | 728 | 211 | 36 | 16 | 11 | 23 |
| 12 | 30 | 54 | 187 | 228 | 559 | 482 | 698 | 728 | 190 | 42 | 16 | 13 | 27 |
| 13 | 25 | 54 | 174 | 262 | 482 | 507 | 728 | 698 | 140 | 32 | 13 | 13 | 27 |
| 14 | 25 | 54 | 162 | 262 | 457 | 559 | 669 | 669 | 152 | 32 | 13 | 16 | 19 |
| 15 | 25 | 48 | 150 | 244 | 281 | 507 | 698 | 586 | 152 | 32 | 13 | 19 | 23 |
| 16 | 42 | 42 | 128 | 281 | 409 | 482 | 698 | 586 | 152 | 27 | 13 | 41 | 23 |
| 17 | 48 | 60 | 139 | 342 | 586 | 533 | 728 | 559 | 140 | 27 | 13 | 27 | 23 |
| 18 | 25 | 48 | 118 | 364 | 533 | 669 | 790 | 559 | 140 | 36 | 13 | 19 | 23 |
| 19 | 36 | 67 | 98 | 409 | 433 | 1,240 | 888 | 559 | 128 | 36 | 13 | 19 | 19 |
| 20 | 48 | 344 | 108 | 364 | 559 | 1,130 | 956 | 482 | 118 | 36 | 13 | 19 | 19 |
| 21 | 36 | 920 | 128 | 409 | 641 | 759 | 855 | 482 | 118 | 23 | 13 | 19 | 19 |
| 22 | 60 | 530 | 128 | 409 | 613 | 641 | 855 | 533 | 107 | 23 | 13 | 19 | 19 |
| 23 | 36 | 560 | 118 | 409 | 482 | 559 | 855 | 533 | 118 | 23 | 11 | 19 | ...... |
| 24 | 36 | 680 | 90 | 457 | 457 | 457 | 888 | 559 | 98 | 23 | 11 | 19 | ...... |
| 25 | 36 | 590 | 128 | 409 | 457 | 386 | 922 | 533 | 98 | 19 | 11 | 19 | ...... |
| 26 | 25 | 415 | 128 | 613 | 244 | 482 | 956 | 482 | 98 | 23 | 11 | 19 | ...... |
| 27 | 25 | 283 | 82 | 559 | 457 | 409 | 956 | 457 | 98 | 19 | 11 | 19 | ...... |
| 28 | 36 | 215 | 74 | 559 | 321 | 386 | 1,030 | 507 | 65 | 19 | 11 | 19 | ...... |
| 29 | 42 | 200 | 139 | 533 | ...... | 386 | 790 | 386 | 72 | 16 | 11 | 19 | ...... |
| 30 | 42 | 187 | 162 | 559 | ...... | 507 | 759 | 386 | 72 | 19 | 13 | 19 | ...... |
| 31 | 42 | ...... | 302 | 533 | ...... | 559 | ...... | 457 | ...... | 16 | 13 | ...... | ...... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 15 to Dec. 31, 1909, [illegible] defined between 230 and 1,040 second-feet; Jan. 1 to Oct. 22, 1910, fairly well defined. Discharge [illegible]ted on account of ice Jan. 1–14, 1909.

*Monthly discharge of Little Truckee River at Pine station, Cal., for 1903–1907.*

[Drainage area, 166 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1903.** | | | | | | | |
| June 25–30 | 200 | 184 | 191 | 1.15 | 0.26 | 2,273 | |
| July | 200 | 31 | 89 | .54 | .62 | 5,472 | |
| August | 29 | 18 | 22 | .13 | .15 | 1,353 | |
| September 1–20 | ........ | ........ | 18 | .11 | .08 | 714 | |
| **1903–4.** | | | | | | | |
| October 25–31 | ........ | ........ | 39 | .23 | .06 | 541 | |
| November | 296 | 26 | 117 | .70 | .78 | 6,962 | |
| December | 91 | 45 | 63 | .38 | .44 | 3,874 | |
| January | 192 | 88 | 140 | .843 | .97 | 8,608 | |
| February | 1,296 | 137 | 467 | 2.81 | 3.03 | 26,860 | |
| March | 1,236 | 445 | 742 | 4.47 | 5.15 | 45,620 | |
| April | 1,809 | 524 | 981 | 5.91 | 6.59 | 58,370 | |
| May | 1,337 | 584 | 1,013 | 6.10 | 7.03 | 62,290 | |
| June | 901 | 455 | 688 | 4.14 | 4.62 | 40,940 | |
| July | 436 | 73 | 209 | 1.26 | 1.45 | 12,850 | |
| August | 73 | 35 | 49.3 | .297 | .34 | 3,031 | |
| September | 76 | 31 | 37.8 | .228 | .25 | 2,249 | |
| The period | ........ | ........ | ........ | ........ | ........ | 272,000 | |
| **1904–5.** | | | | | | | |
| October | 536 | 43 | 115 | .693 | .80 | 7,071 | |
| November | 86 | 48 | 55.6 | .335 | .37 | 3,308 | |
| December | 174 | 28 | 64.6 | .389 | .45 | 3,972 | |
| January | 126 | 77 | 101 | .608 | .70 | 6,210 | |
| February | 144 | 57 | 89 | .536 | .56 | 4,943 | |
| March | 277 | 139 | 188 | 1.13 | 1.30 | 11,560 | |
| April | 760 | 183 | 334 | 2.01 | 2.24 | 19,870 | |
| May | 640 | 307 | 477 | 2.87 | 3.31 | 29,330 | |
| June | 483 | 122 | 337 | 2.03 | 2.26 | 20,060 | |
| July | 148 | 50 | 86.3 | .520 | .60 | 5,306 | |
| August | 50 | 33 | 42.1 | .254 | .29 | 2,589 | |
| September | 48 | 33 | 37.4 | .225 | .25 | 2,226 | |
| The year | 760 | 28 | 161 | .970 | 13.13 | 116,000 | |
| **1905–6.** | | | | | | | |
| October | 45 | 42 | 44.2 | .266 | .31 | 2,718 | |
| November | 107 | 40 | 55.4 | .334 | .37 | 3,296 | |
| December | 126 | 78 | 106 | .637 | .73 | 6,518 | |
| January | 1,020 | 104 | 359 | 2.16 | 2.49 | 22,100 | |
| February | 229 | 91 | 141 | .849 | .88 | 7,830 | |
| March | 373 | 84 | 159 | .958 | 1.10 | 9,780 | |
| April | 1,300 | 229 | 729 | 4.39 | 4.90 | 43,400 | |
| May | 1,350 | 560 | 972 | 5.86 | 6.76 | 59,800 | |
| June | 1,350 | 610 | 950 | 5.72 | 6.38 | 56,500 | |
| July | 849 | 152 | 478 | 2.88 | 3.32 | 29,400 | |
| August | 157 | 65 | 91.9 | .554 | .64 | 5,650 | |
| September | 65 | 53 | 56.7 | .342 | .38 | 3,370 | |
| The year | 1,350 | 40 | 345 | 2.08 | 28.26 | 250,000 | |
| **1906–7.** | | | | | | | |
| October | 94 | 50 | 60.9 | .367 | .42 | 3,740 | |
| November | 157 | 66 | 79.7 | .480 | .54 | 4,740 | |
| December | 178 | 65 | 103 | .608 | .71 | 6,330 | |
| January | 351 | 80 | 204 | 1.23 | 1.42 | 12,500 | C. |
| February | 330 | 165 | 229 | 1.38 | 1.44 | 12,700 | C. |
| March | 1,560 | 129 | 417 | 2.51 | 2.89 | 25,600 | B. |
| April | 1,360 | 418 | 974 | 5.87 | 6.55 | 58,000 | B. |
| May | 1,160 | 750 | 908 | 5.47 | 6.31 | 55,800 | B. |
| June | 1,130 | 440 | 761 | 4.58 | 5.11 | 45,300 | B. |
| July | 755 | 276 | 461 | 2.78 | 3.20 | 28,300 | B. |
| August | 247 | 103 | 149 | .898 | 1.04 | 9,160 | B. |
| September | 117 | 84 | 95.4 | .575 | .64 | 5,680 | B. |
| The year | 1,560 | 50 | 370 | 2.23 | 30.27 | 268,000 | |
| **1907.** | | | | | | | |
| October | 133 | 84 | 97.3 | .586 | .68 | 5,980 | B. |
| November | 125 | 90 | 96.9 | .584 | .65 | 5,770 | C. |
| December | 247 | 90 | 122 | .735 | .85 | 7,500 | C. |

NOTE.—Values during the winter periods may be in error on account of ice. Discharge estimated Nov. 17–30, 1907.

*Monthly discharge of Little Truckee River at Starr, Cal., for 1908–1910.*

[Drainage area, 166 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1908.** | | | | | | | |
| January | ........ | ........ | 67.6 | 0.407 | 0.47 | 4,160 | C. |
| February | 83 | 48 | 65.9 | .397 | .43 | 3,790 | C. |
| March | 312 | 55 | 162 | .976 | 1.13 | 9,960 | A. |
| April | 578 | 192 | 316 | 1.90 | 2.12 | 23,600 | A. |
| May | 573 | 221 | 332 | 2.00 | 2.31 | 20,400 | A. |
| June | 473 | 165 | 297 | 1.79 | 2.00 | 17,700 | A. |
| July | 178 | 31 | 79.5 | .479 | .55 | 4,890 | B. |
| August | 42 | 14 | 26.0 | .157 | .18 | 1,600 | B. |
| September | 31 | 14 | 21.9 | .132 | .15 | 1,300 | C. |
| The period | ........ | ........ | ........ | ........ | ........ | 87,400 | |
| **1908–9.** | | | | | | | |
| October | 130 | 26 | 40.7 | .245 | .28 | 2,500 | B. |
| November | 62 | 26 | 41.0 | .247 | .28 | 2,440 | B. |
| December | ........ | ........ | 38.7 | .233 | .27 | 2,380 | C. |
| January | 1,920 | 80 | 520 | 3.13 | 3.61 | 32,000 | C. |
| February | 215 | 128 | 154 | .928 | .97 | 8,550 | B. |
| March | 187 | 108 | 144 | .867 | 1.00 | 8,850 | B. |
| April | 1,500 | 174 | 786 | 4.73 | 5.28 | 46,800 | A. |
| May | 1,440 | 560 | 946 | 5.70 | 6.57 | 58,200 | A. |
| June | 1,380 | 620 | 895 | 5.39 | 6.01 | 53,300 | A. |
| July | 620 | 74 | 235 | 1.42 | 1.64 | 14,400 | B. |
| August | 344 | 20 | 77.7 | .468 | .54 | 4,780 | B. |
| September | 36 | 15 | 22.5 | .136 | .15 | 1,340 | B. |
| The year | 1,920 | 15 | 325 | 1.96 | 26.60 | 236,000 | |
| **1909–10.** | | | | | | | |
| October | 60 | 25 | 34.5 | .208 | .24 | 2,120 | B. |
| November | 920 | 36 | 200 | 1.20 | 1.34 | 11,900 | B. |
| December | 680 | 74 | 189 | 1.14 | 1.31 | 11,600 | B. |
| January | 613 | 228 | 366 | 2.20 | 2.54 | 22,500 | D. |
| February | 855 | 244 | 526 | 3.17 | 3.30 | 29,200 | D. |
| March | 1,240 | 196 | 484 | 2.92 | 3.37 | 29,800 | B. |
| April | 1,030 | 586 | 782 | 4.71 | 5.26 | 46,500 | B. |
| May | 728 | 386 | 552 | 3.33 | 3.84 | 33,900 | B. |
| June | 482 | 65 | 189 | 1.14 | 1.27 | 11,200 | B. |
| July | 72 | 16 | 33.5 | .202 | .23 | 2,060 | A. |
| August | 16 | 11 | 12.9 | .078 | .09 | 793 | B. |
| September | 41 | 11 | 17.0 | .102 | .11 | 1,010 | B. |
| The year | 1,240 | 11 | 282 | 1.70 | 22.90 | 203,000 | |
| **1910.** | | | | | | | |
| October 1–22 | ........ | ........ | 19.7 | .119 | .10 | 896 | B. |

NOTE.—Daily discharge estimated on account of ice Jan. 1–20, 25, and 26, and Dec. 15–31, 1908.

## LITTLE TRUCKEE RIVER AT BOCA, CAL.

This station, which is located 150 feet above the mouth of the stream and 500 feet below the ice-pond dam, was established January 1, 1911. The station on this river was originally established in 1903 at a point about 3 miles north of Boca at Pine station. It was removed to Starr, about 5 miles north of Boca, January 1, 1908, and observations at that point were discontinued October 23, 1910.

The gage is an inclined staff on the left bank 100 feet above the railroad bridge.

The bed of the stream is composed of gravel and appears permanent.

Discharge measurements are made from a car and cable at the gage.

The relation between gage height and discharge during the winter months is affected by ice.

The flow of the stream is regulated by the dam; water passing through the small power plant, which is operated only during the night, does not pass the gage. For these reasons the gage height record is not very satisfactory. The discharge rating curve is well defined.

Gage heights are furnished by the United States Reclamation Service.

Discharge measurements made by the Stone & Webster Engineering Corporation have been furnished to the United States Geological Survey for publication.

*Discharge measurements of Little Truckee River at Boca, Cal., in 1911.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* |
| Apr. 14 | J. E. Stewart | 2.49 | 608 |
| May 9 | Stone & Webster Engineering Corporation | 3.70 | 1,320 |
| June 7 | J. E. Stewart | 3.57 | 1,500 |
| July 18 | Stone & Webster Engineering Corporation | 2.30 | 444 |
| Aug. 5 | G. T. Peakema | 1.30 | 86 |
| 12 | Stone & Webster Engineering Corporation | 1.13 | 60 |
| Sept. 26 | F. C. Ebert | .90 | 25 |

*Daily gage height, in feet, of Little Truckee River at Boca, Cal., for 1911–12.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | | | |
| 1 | 1.05 | 1.8 | 1.25 | 2.7 | 3.7 | 3.35 | 2.75 | 1.6 | 0.85 |
| 2 | 1.05 | 1.9 | 1.25 | 2.95 | 3.8 | 3.4 | 2.65 | 1.5 | .8 |
| 3 | 1.0 | 1.75 | 1.3 | 3.2 | 4.1 | 3.6 | 2.65 | 1.5 | .8 |
| 4 | 1.0 | 1.5 | 1.6 | 3.15 | 4.7 | 3.7 | 2.6 | 1.4 | .8 |
| 5 | 1.05 | 1.5 | 1.3 | 3.05 | 4.5 | 3.8 | 2.6 | 1.25 | .75 |
| 6 | 1.05 | 1.45 | 1.3 | 3.1 | 4.0 | 3.9 | 2.6 | 1.3 | .85 |
| 7 | 1.1 | 1.55 | 1.55 | 3.1 | 3.8 | 3.7 | 2.6 | 1.3 | .85 |
| 8 | 1.1 | 1.4 | 1.4 | 3.1 | 4.0 | 3.7 | 2.55 | 1.25 | .8 |
| 9 | .9 | 1.4 | 1.2 | 3.05 | 3.7 | 3.6 | 2.45 | 1.2 | .85 |
| 10 | .75 | 1.45 | 1.4 | 2.8 | 3.55 | 3.65 | 2.4 | 1.15 | .85 |
| 11 | .5 | 1.3 | 1.4 | 2.65 | 3.7 | 3.8 | 2.4 | 1.15 | .8 |
| 12 | .8 | 1.4 | 1.45 | 2.6 | 3.7 | 3.95 | 2.35 | 1.15 | ........ |
| 13 | .5 | 1.45 | 1.45 | 2.6 | 3.65 | 3.8 | 2.35 | 1.15 | .95 |
| 14 | .4 | 1.35 | 1.40 | 2.55 | 3.4 | 3.8 | 2.4 | 1.1 | .9 |
| 15 | .45 | 1.35 | 1.4 | 2.6 | 3.2 | 3.75 | 2.3 | 1.1 | .85 |
| 16 | 1.4 | 1.3 | 1.35 | 2.75 | 3.2 | 3.7 | 2.35 | 1.05 | .85 |
| 17 | 1.4 | 1.2 | 1.4 | 2.9 | 3.05 | 3.65 | 2.35 | 1.05 | .85 |
| 18 | 1.4 | 1.25 | 1.4 | 3.3 | 3.05 | 3.65 | 2.3 | 1.55 | .85 |
| 19 | 1.25 | 1.2 | 1.5 | 3.3 | 3.05 | 3.7 | 2.2 | 1.0 | .85 |
| 20 | 1.3 | 1.2 | 1.6 | 3.2 | 3.2 | 3.7 | 2.2 | 1.0 | .85 |
| 21 | 1.05 | 1.15 | 1.65 | 3.4 | 3.3 | 3.65 | 1.95 | .95 | .9 |
| 22 | 1.1 | 1.25 | 1.7 | 3.7 | 3.45 | 3.5 | 1.8 | .95 | .85 |
| 23 | 1.1 | 1.2 | 1.85 | 4.0 | 3.7 | 3.2 | 1.8 | .9 | .9 |
| 24 | 1.2 | 1.2 | 1.9 | 4.3 | 3.8 | 3.05 | 1.8 | .95 | .85 |
| 25 | 1.15 | 1.15 | 2.0 | 4.7 | 3.4 | 2.85 | 1.75 | .95 | .85 |
| 26 | 1.15 | 1.15 | 2.1 | 4.9 | 3.25 | 2.7 | 1.7 | .9 | ........ |
| 27 | 1.15 | 1.2 | 2.1 | 4.35 | 3.25 | 3.0 | 1.65 | .9 | ........ |
| 28 | 1.1 | 1.2 | 2.15 | 4.1 | 3.3 | 3.1 | 1.9 | .9 | ........ |
| 29 | 1.2 | ........ | 2.2 | 4.1 | 3.3 | 2.9 | 1.7 | .9 | ........ |
| 30 | 1.5 | ........ | 2.35 | 4.0 | 3.3 | 2.9 | 1.6 | .9 | ........ |
| 31 | 1.75 | ........ | 2.5 | ........ | 3.3 | ........ | 1.6 | .85 | ........ |

*Daily gage height, in feet, of Little Truckee River at Boca, Cal., for 1911-12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | | 0.85 | 1.05 | 0.6 | 0.75 | 0.85 | 1.25 | 1.9 | 2.4 |
| 2 | | .8 | .9 | .7 | .75 | .85 | 1.3 | 1.8 | 2.4 |
| 3 | | .75 | .75 | .85 | .7 | .7 | 1.45 | 1.7 | 2.45 |
| 4 | | .75 | 1.1 | .7 | .75 | .85 | 1.4 | 1.85 | 2.6 |
| 5 | | .8 | .9 | .65 | .7 | 1.0 | 1.35 | 1.8 | 2.6 |
| 6 | 0.8 | .75 | .95 | .75 | .7 | .9 | 1.4 | 1.75 | 2.55 |
| 7 | .75 | .8 | .9 | .7 | .6 | .85 | 1.5 | 1.8 | 2.5 |
| 8 | .75 | .8 | .75 | .75 | .8 | .8 | 1.55 | 1.85 | 2.35 |
| 9 | .75 | .85 | .8 | 1.05 | .8 | .8 | 1.6 | 2.0 | 2.2 |
| 10 | | 1.0 | .8 | .8 | .8 | .95 | 1.5 | 2.05 | 2.1 |
| 11 | .75 | .75 | .85 | .75 | .8 | .9 | 1.35 | 2.2 | 2.05 |
| 12 | .75 | .85 | .75 | .8 | .75 | .9 | 1.3 | 2.3 | 2.2 |
| 13 | .8 | .9 | .7 | .95 | .75 | .9 | 1.3 | 2.4 | 2.1 |
| 14 | .8 | .9 | .75 | 1.0 | .8 | .95 | 1.3 | 2.45 | 2.1 |
| 15 | .75 | .96 | .65 | 1.0 | .8 | .85 | 1.3 | 2.45 | 1.95 |
| 16 | .75 | .95 | .6 | 1.1 | .85 | .9 | 1.35 | 2.5 | 1.96 |
| 17 | .75 | .9 | .6 | 1.0 | 1.1 | .9 | 1.6 | 2.5 | 1.85 |
| 18 | .8 | .8 | .55 | .9 | 1.05 | 1.1 | 1.65 | 2.5 | 1.8 |
| 19 | .8 | .85 | .5 | .9 | .95 | 1.7 | 1.35 | 2.5 | 1.7 |
| 20 | .9 | .85 | .55 | .8 | .9 | 1.4 | 1.26 | 2.35 | 1.7 |
| 21 | .85 | .85 | .55 | .7 | .86 | 1.35 | 1.2 | 2.25 | 1.8 |
| 22 | .75 | .8 | .6 | .8 | .85 | 1.3 | 1.2 | 2.1 | 1.65 |
| 23 | .8 | .85 | .8 | .8 | .86 | 1.0 | 1.2 | 2.1 | 1.6 |
| 24 | .85 | .9 | .7 | .8 | .7 | 1.05 | 1.35 | 2.0 | 1.55 |
| 25 | .8 | .9 | .65 | .85 | .7 | 1.1 | 1.4 | 1.9 | 1.45 |
| 26 | .8 | 1.0 | .55 | .75 | .7 | 1.25 | 1.3 | 1.9 | 1.4 |
| 27 | .8 | .95 | .4 | .7 | .8 | 1.3 | 1.3 | 1.85 | 1.4 |
| 28 | .85 | .8 | .65 | .65 | .8 | 1.35 | 1.35 | 1.9 | 1.35 |
| 29 | .8 | .85 | .7 | .8 | .8 | 1.35 | 1.5 | 2.2 | 1.25 |
| 30 | .85 | .85 | .6 | .85 | | 1.15 | 1.55 | 2.2 | 1.2 |
| 31 | .85 | | .65 | .8 | | 1.1 | | 2.25 | |

*Daily discharge, in second-feet, of Little Truckee River at Boca, Cal., for 1911-12.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | | | |
| 1 | 50 | 235 | 78 | 695 | 1,350 | 1,110 | 725 | 162 | 32 |
| 2 | 50 | 275 | 78 | 848 | 1,420 | 1,140 | 665 | 131 | 28 |
| 3 | 45 | 216 | 86 | 1,010 | 1,630 | 1,280 | 665 | 131 | 28 |
| 4 | 45 | 131 | 162 | 978 | 2,180 | 1,350 | 635 | 107 | 28 |
| 5 | 50 | 131 | 86 | 912 | 1,940 | 1,420 | 635 | 96 | 24 |
| 6 | 50 | 119 | 86 | 945 | 1,560 | 1,490 | 635 | 86 | 32 |
| 7 | 56 | 146 | 146 | 945 | 1,420 | 1,350 | 635 | 86 | 32 |
| 8 | 56 | 107 | 107 | 945 | 1,560 | 1,350 | 608 | 78 | 28 |
| 9 | 36 | 107 | 70 | 912 | 1,350 | 1,280 | 552 | 70 | 32 |
| 10 | 24 | 119 | 107 | 756 | 1,240 | 1,320 | 525 | 63 | 32 |
| 11 | 10 | 86 | 107 | 665 | 1,350 | 1,420 | 525 | 63 | 28 |
| 12 | 28 | 107 | 119 | 635 | 1,350 | 1,520 | 498 | 63 | 100 |
| 13 | 10 | 119 | 119 | 635 | 1,320 | 1,420 | 498 | 63 | 40 |
| 14 | 6 | 96 | 107 | 608 | 1,140 | 1,420 | 525 | 56 | 36 |
| 15 | 8 | 96 | 107 | 635 | 1,010 | 1,380 | 470 | 56 | 32 |
| 16 | 107 | 86 | 96 | 725 | 1,010 | 1,350 | 498 | 50 | 32 |
| 17 | 107 | 70 | 107 | 815 | 912 | 1,320 | 498 | 50 | 32 |
| 18 | 107 | 78 | 107 | 1,080 | 912 | 1,320 | 470 | 146 | 32 |
| 19 | 78 | 70 | 131 | 1,080 | 912 | 1,350 | 415 | 45 | 32 |
| 20 | 86 | 70 | 162 | 1,010 | 1,010 | 1,350 | 415 | 45 | 32 |
| 21 | 50 | 63 | 180 | 1,140 | 1,080 | 1,320 | 298 | 40 | 36 |
| 22 | 56 | 78 | 197 | 1,350 | 1,180 | 1,210 | 235 | 40 | 32 |
| 23 | 56 | 70 | 255 | 1,560 | 1,350 | 1,010 | 235 | 36 | 36 |
| 24 | 70 | 70 | 275 | 1,780 | 1,420 | 912 | 235 | 40 | 32 |
| 25 | 63 | 63 | 320 | 2,100 | 1,140 | 785 | 216 | 40 | 32 |
| 26 | 63 | 63 | 365 | 2,260 | 1,040 | 695 | 197 | 36 | |
| 27 | 63 | 70 | 365 | 1,820 | 1,040 | 880 | 180 | 36 | |
| 28 | 56 | 70 | 390 | 1,630 | 1,080 | 945 | 275 | 36 | |
| 29 | 70 | | 415 | 1,630 | 1,080 | 815 | 197 | 36 | |
| 30 | 131 | | 498 | 1,560 | 1,080 | 815 | 162 | 36 | |
| 31 | 216 | | 580 | | 1,080 | | 162 | 32 | |

*Daily discharge, in second-feet, of Little Truckee River at Boca, Cal., for 1911-12*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 0 | 32 | 50 | 15 | 24 | 32 | 78 | 275 | 525 |
| 2 | 0 | 28 | 36 | 21 | 24 | 32 | 86 | 235 | 525 |
| 3 | 0 | 24 | 24 | 18 | 21 | 21 | 119 | 197 | 552 |
| 4 | 0 | 24 | 56 | 21 | 24 | 32 | 107 | 255 | 635 |
| 5 | 0 | 28 | 36 | 18 | 21 | 45 | 96 | 235 | 635 |
| 6 | 28 | 24 | 40 | 24 | 21 | 36 | 107 | 216 | 608 |
| 7 | 24 | 28 | 36 | 21 | 15 | 32 | 131 | 236 | 580 |
| 8 | 24 | 28 | 24 | 24 | 28 | 28 | 146 | 255 | 498 |
| 9 | 24 | 32 | 28 | 50 | 28 | 28 | 162 | 320 | 415 |
| 10 | 0 | 45 | 28 | 28 | 28 | 40 | 131 | 342 | 365 |
| 11 | 24 | 24 | 32 | 24 | 28 | 36 | 96 | 415 | 342 |
| 12 | 24 | 32 | 24 | 28 | 24 | 36 | 86 | 470 | 415 |
| 13 | 28 | 36 | 21 | 40 | 24 | 36 | 86 | 525 | 365 |
| 14 | 28 | 36 | 24 | 45 | 28 | 40 | 86 | 552 | 365 |
| 15 | 24 | 40 | 18 | 45 | 28 | 32 | 86 | 552 | 298 |
| 16 | 24 | 40 | 15 | 56 | 32 | 36 | 96 | 580 | 298 |
| 17 | 24 | 36 | 15 | 45 | 56 | 36 | 162 | 580 | 255 |
| 18 | 28 | 28 | 12 | 36 | 50 | 56 | 180 | 580 | 235 |
| 19 | 28 | 32 | 10 | 36 | 40 | 197 | 96 | 580 | 197 |
| 20 | 36 | 32 | 12 | 28 | 36 | 107 | 78 | 498 | 197 |
| 21 | 32 | 32 | 12 | 21 | 32 | 96 | 70 | 442 | 235 |
| 22 | 24 | 28 | 15 | 28 | 32 | 86 | 70 | 365 | 180 |
| 23 | 28 | 32 | 28 | 28 | 32 | 45 | 70 | 365 | 162 |
| 24 | 32 | 36 | 21 | 28 | 21 | 50 | 96 | 320 | 146 |
| 25 | 28 | 36 | 12 | 32 | 21 | 56 | 107 | 275 | 119 |
| 26 | 28 | 45 | 12 | 24 | 21 | 78 | 86 | 275 | 107 |
| 27 | 28 | 40 | 6 | 21 | 28 | 86 | 86 | 255 | 107 |
| 28 | 32 | 28 | 18 | 18 | 28 | 96 | 96 | 275 | 96 |
| 29 | 28 | 32 | 21 | 28 | 28 | 96 | 131 | 415 | 78 |
| 30 | 32 | 32 | 15 | 32 | ........ | 63 | 146 | 415 | 70 |
| 31 | 32 | ........ | 18 | 28 | ........ | 56 | ........ | 442 | ........ |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1, 1911, to June 30, 1912, well defined.

*Monthly discharge of Little Truckee River at Boca, Cal., for 1890.*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). |
|---|---|---|
| April | 958 | 57,000 |
| May | 1,998 | 123,000 |
| June | 1,491 | 88,700 |
| July | 749 | 46,100 |
| August | 200 | 12,300 |
| September | 97 | 5,570 |
| October | 86 | 5,290 |
| The period | .......... | 338,000 |

*Monthly discharge of Little Truckee River at Boca, Cal., for 1911–12.*

[Drainage area, [illegible] square miles.]

| Month | Discharge in second-feet | | | | Run-off | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1911.** | | | | | | | |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| September | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| The period | | | | | | [illegible] | |
| **1911–12.** | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| The period | | | | | | [illegible] | |

## WEBBER CREEK NEAR TRUCKEE, CAL.

This station is located at the outlet of Webber Lake, in the SE. ¼ NE. ¼ sec. 28, T. 19 N., R. 14 E., about 1½ miles above the junction with Little Truckee River, and 16 miles northwest of Truckee.

The drainage area above the station is about 14 square miles.

The gage is a vertical staff at the footbridge from which discharge measurements are made.

The channel is compact gravel and is fairly permanent.

Results are excellent, except during the winter season, when flow is affected by ice.

The following records of daily discharge were furnished by the Stone & Webster Engineering Corporation:

*Daily discharge, in second-feet, of Webber Creek near Truckee, Cal., for 1909–10.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ...... | 1 | 131 | 47 | 26 | 22 | 57 | 151 | 116 | 14 | 1 |
| 2 | ...... | 1 | 197 | 45 | 25 | 23 | 62 | 138 | 101 | 12 | 1 |
| 3 | ...... | 2 | 119 | 43 | 24 | 26 | 67 | 117 | 94 | 11 | 1 |
| 4 | ...... | 3 | 88 | 38 | 23 | 28 | 65 | 104 | 78 | 10 | 1 |
| 5 | ...... | 3 | 57 | 33 | 23 | 30 | 64 | 113 | 54 | 1 | 1 |
| 6 | ...... | 3 | 53 | 30 | 22 | 33 | 67 | 119 | 33 | 1 | 1 |
| 7 | ...... | 3 | 47 | 28 | 22 | 35 | 69 | 125 | 33 | 1 | 1 |
| 8 | ...... | 122 | 48 | 26 | 21 | 36 | 82 | 144 | 34 | 1 | 1 |
| 9 | ...... | 65 | 49 | 24 | 21 | 39 | 96 | 169 | 20 | 1 | 1 |
| 10 | ...... | 41 | 40 | 24 | 21 | 41 | 108 | 183 | 20 | 1 | 1 |
| 11 | ...... | 21 | 33 | 22 | 21 | 43 | 108 | 172 | 21 | 1 | 1 |
| 12 | ...... | 15 | 27 | 22 | 21 | 49 | 98 | 164 | 21 | 1 | 1 |
| 13 | ...... | 13 | 21 | 23 | 21 | 51 | 104 | 183 | 21 | 1 | 1 |
| 14 | ...... | 12 | 16 | 26 | 21 | 54 | 113 | 169 | 21 | 1 | 1 |
| 15 | ...... | 10 | 16 | 28 | 21 | 57 | 118 | 158 | 22 | 1 | 1 |
| 16 | ...... | 8 | 21 | 30 | 21 | 59 | 127 | 144 | 22 | 1 | 1 |
| 17 | ...... | 7 | 27 | 27 | 21 | 62 | 143 | 132 | 21 | 1 | 1 |
| 18 | ...... | 6 | 24 | 24 | 20 | 69 | 158 | 117 | 21 | 1 | 1 |
| 19 | 1 | 11 | 24 | 21 | 20 | 90 | 183 | 127 | 21 | 1 | 1 |
| 20 | 1 | 57 | 24 | 19 | 20 | 114 | 207 | 143 | 21 | 1 | 1 |
| 21 | 1 | 249 | 24 | 16 | 21 | 97 | 217 | 160 | 21 | 1 | 1 |
| 22 | 1 | 187 | 23 | 19 | 21 | 78 | 207 | 138 | 21 | 1 | 1 |
| 23 | 1 | 151 | 21 | 24 | 21 | 69 | 205 | 132 | 21 | 1 | 1 |
| 24 | 1 | 197 | 21 | 26 | 22 | 65 | 213 | 135 | 21 | 1 | 1 |
| 25 | 1 | 398 | 19 | 28 | 22 | 60 | 223 | 128 | 16 | 1 | 1 |
| 26 | 1 | 104 | 19 | 32 | 21 | 57 | 240 | 120 | 16 | 1 | 1 |
| 27 | 1 | 69 | 19 | 33 | 19 | 56 | 244 | 104 | 16 | 1 | 1 |
| 28 | 1 | 53 | 18 | 31 | 21 | 54 | 249 | 101 | 16 | 1 | 1 |
| 29 | 1 | 46 | 21 | 29 | ...... | 53 | 207 | 70 | 16 | 1 | 1 |
| 30 | 1 | 42 | 33 | 28 | ...... | 51 | 197 | 78 | 16 | 1 | 1 |
| 31 | 1 | ...... | 49 | 27 | ...... | 53 | ...... | 85 | ...... | 1 | 1 |

*Monthly discharge of Webber Creek near Truckee, Cal., for 1909–10.*

[Drainage area, 14 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| October 19-31 | 1 | 1 | 1.0 | 0.071 | 0.08 | 26 |
| November | 398 | 1 | 63.3 | 4.52 | 5.04 | 3,770 |
| December | 197 | 16 | 42.2 | 3.01 | 3.48 | 2,590 |
| January | 47 | 16 | 28.2 | 2.01 | 2.32 | 1,730 |
| February | 26 | 19 | 21.5 | 1.54 | 1.60 | 1,190 |
| March | 114 | 22 | 53.4 | 3.81 | 4.39 | 3,280 |
| April | 249 | 57 | 143 | 10.21 | 11.38 | 8,510 |
| May | 183 | 70 | 133 | 9.50 | 10.95 | 8,180 |
| June | 116 | 16 | 32.5 | 2.32 | 2.59 | 1,930 |
| July | 14 | 1 | 2.4 | .171 | .20 | 148 |
| August | 1 | 1 | 1.0 | .071 | .08 | 61 |
| The period | .......... | .......... | .......... | .......... | .......... | 31,400 |

NOTE.—Monthly values computed by engineers of the United States Geological Survey.

## INDEPENDENCE CREEK NEAR TRUCKEE, CAL.

This station is located at the outlet of Independence Lake, in the SW. ¼ NW. ¼ sec. 35, T. 19 N., R. 15 E., about 4½ miles above the junction with Little Truckee River and 10 miles northwest of Truckee.

The drainage area above the station is about 8.4 square miles.

The gage is a vertical staff near the car and cable from which discharge measurements are made.

The channel, which is composed of gravel, is fairly permanent.

Results are excellent except during the winter season, when the flow is affected by ice.

The following records of daily discharge were furnished by the Stone & Webster Engineering Corporation:

*Daily discharge, in second-feet, of Independence Creek near Truckee, Cal., for 1909–10.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ........ | 4 | 70 | 10 | 9 | 24 | 62 | 86 | 54 | 21 |
| 2 | ........ | 5 | 78 | 10 | 6 | 24 | 62 | 70 | 173 | 21 |
| 3 | ........ | 5 | 78 | 7 | 7 | 24 | 62 | 62 | 106 | 21 |
| 4 | ........ | 4 | 78 | 6 | 7 | 24 | 54 | 42 | 106 | 21 |
| 5 | ........ | 4 | 62 | 9 | 7 | 18 | 51 | 30 | 62 | 21 |
| 6 | ........ | 5 | 62 | 7 | 6 | 18 | 51 | 36 | 62 | 21 |
| 7 | ........ | 42 | 62 | 9 | 9 | 18 | 48 | 42 | 54 | 18 |
| 8 | ........ | 13 | 78 | 6 | 7 | 18 | 48 | 42 | 54 | 18 |
| 9 | ........ | 4 | 70 | 7 | 7 | 18 | 48 | 86 | 48 | 13 |
| 10 | ........ | 13 | 70 | 7 | 7 | 18 | 48 | 131 | 48 | 13 |
| 11 | ........ | 4 | 78 | 6 | 9 | 13 | 48 | 131 | 48 | 11 |
| 12 | ........ | 4 | 78 | 3 | 7 | 13 | 48 | 118 | 30 | 11 |
| 13 | ........ | 9 | 62 | 5 | 7 | 13 | 48 | 131 | 30 | 11 |
| 14 | ........ | 13 | 62 | 5 | 7 | 18 | 48 | 95 | 24 | 11 |
| 15 | ........ | 13 | 62 | 6 | 5 | 18 | 48 | 70 | 24 | 9 |
| 16 | ........ | 13 | 48 | 5 | 6 | 24 | 51 | 95 | 24 | 9 |
| 17 | ........ | 9 | 42 | 6 | 7 | 24 | 51 | 95 | 24 | 5 |
| 18 | ........ | 9 | 42 | 5 | 9 | 24 | 54 | 96 | 24 | 5 |
| 19 | ........ | 62 | 42 | 6 | 7 | 187 | 54 | 95 | 24 | 5 |
| 20 | ........ | 78 | 42 | 6 | 6 | 187 | 106 | 95 | 24 | ........ |
| 21 | 4 | 173 | 42 | 10 | 6 | 4 | 100 | 78 | 24 | ........ |
| 22 | 4 | 173 | 42 | 7 | 7 | 6 | 118 | 36 | 24 | ........ |
| 23 | 4 | 173 | 36 | 9 | 7 | 9 | 106 | 30 | 24 | ........ |
| 24 | 18 | 173 | 36 | 9 | 7 | 13 | 86 | 18 | 22 | ........ |
| 25 | 3 | 187 | 36 | 7 | 9 | 13 | 118 | 48 | 22 | ........ |
| 26 | 4 | 145 | 30 | 9 | 6 | 13 | 118 | 48 | 22 | ........ |
| 27 | 4 | 118 | 13 | 9 | 7 | 13 | 118 | 13 | 22 | ........ |
| 28 | 4 | 66 | 9 | 9 | 13 | 13 | 131 | 13 | 22 | ........ |
| 29 | 6 | 62 | 6 | 10 | ........ | 86 | 106 | 18 | 22 | ........ |
| 30 | 4 | 54 | 9 | 7 | ........ | 95 | 96 | 54 | 22 | ........ |
| 31 | 4 | ........ | 13 | 9 | ........ | 95 | ........ | 54 | ........ | ........ |

*Monthly discharge of Independence Creek near Truckee, Cal., for 1909–10.*

[Drainage area, 8.4 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| October 21–31 | 18 | 3 | 5.4 | 0.643 | 0.26 | 118 |
| November | 187 | 4 | 54.6 | 6.50 | 7.25 | 3,250 |
| December | 78 | 6 | 49.6 | 5.90 | 6.80 | 3,060 |
| January | 10 | 3 | 7.3 | .869 | 1.00 | 449 |
| February | 13 | 5 | 7.3 | .869 | .90 | 405 |
| March | 187 | 4 | 35.0 | 4.17 | 4.81 | 2,150 |
| April | 131 | 48 | 72.9 | 8.68 | 9.68 | 4,340 |
| May | 131 | 13 | 66.4 | 7.90 | 9.11 | 4,080 |
| June | 173 | 22 | 42.3 | 5.04 | 5.62 | 2,520 |
| July 1–19 | 21 | 5 | 14.0 | 1.67 | 1.18 | 528 |
| The period | | | | | | 20,900 |

NOTE.—Monthly values computed by engineers of the United States Geological Survey.

## INDEPENDENCE CREEK BELOW INDEPENDENCE LAKE, CAL.

This station, which is located about one-eighth of a mile below the lake, was established October 24, 1902, and was discontinued June 30, 1907.

Discharge measurements were made from a cable and car or by wading.

A vertical staff gage, 200 feet upstream from the cable, was used until July 1, 1904, when a new vertical staff gage was installed about 75 feet below the lake outlet, both gages reading the same.

The stream bed shifted somewhat, but the records as a whole are good, except those for 1906 and 1907, which were rendered uncertain by lack of sufficient measurements.

The discharge is controlled by the dam at the lower end of the lake. The monthly discharge for the entire period of records, as here published, has been recomputed.

*Discharge measurements of Independence Creek below Independence Lake, Cal., in 1902–1906.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1902. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| Oct. 24 | E. C. Murphy | 1.23 | 0.3 | Aug. 29 | W. A. Wolf | 1.80 | 3.0 |
| | | | | Nov. 16 | ....do | 2.06 | 5.0 |
| 1903. | | | | | | | |
| June 21 | G. B. Lorenz | 1.90 | 15.2 | 1905. | | | |
| July 19 | ....do | 1.60 | 7.3 | June 12 | W. A. Wolf | 3.25 | 77 |
| Aug. 5 | ....do | 1.50 | 4.7 | 26 | ....do | 1.80 | 3.0 |
| 27 | ....do | 1.40 | 1.0 | July 7 | ....do | 2.30 | 15 |
| | | | | Aug. 3 | ....do | 2.00 | 4.4 |
| 1904. | | | | Sept. 11 | ....do | 1.70 | [a]5 |
| June 17 | A. E. Chandler | 3.15 | 123 | | | | |
| July 1 | W. A. Wolf | 3.08 | 97 | 1906. | | | |
| 13 | ....do | 2.75 | 47 | July 31 | M. B. Kennedy | 2.65 | 25.3 |
| 23 | ....do | 2.30 | 13 | | | | |

[a] Estimated.

*Daily gage height, in feet, of Independence Creek below Independence Lake, Cal., for 1902–1907.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902–3. | | | | | | | | | | | | |
| 1 | | 1.33 | 2.20 | 1.70 | 2.45 | 2.00 | 2.00 | 2.80 | ...... | 2.90 | ...... | ...... |
| 2 | | [illegible] | 2.20 | 1.70 | 2.50 | 2.00 | 2.00 | 2.80 | ...... | 2.58 | 1.51 | ...... |
| 3 | ...... | [illegible] | 2.00 | 1.75 | 2.50 | 2.00 | 2.00 | 2.80 | ...... | 2.75 | 1.51 | ...... |
| 4 | ...... | [illegible] | 1.95 | 1.85 | 2.50 | 2.00 | 2.00 | 2.80 | ...... | 2.56 | 1.50 | ...... |
| 5 | ...... | 1.23 | 1.90 | 1.90 | 2.50 | 2.10 | 2.00 | 2.80 | ...... | 2.46 | 1.50 | ...... |
| 6 | ...... | [illegible] | 1.90 | 1.95 | 2.50 | 2.10 | 2.00 | 2.95 | ...... | 2.25 | 1.50 | ...... |
| 7 | ...... | [illegible] | 1.80 | 2.00 | 2.50 | 2.10 | 2.00 | [illegible] | ...... | 2.00 | 1.50 | ...... |
| 8 | ...... | [illegible] | 1.80 | 2.10 | 2.50 | 2.10 | 2.00 | [illegible] | ...... | 1.75 | 1.50 | ...... |
| 9 | ...... | [illegible] | 1.80 | 2.20 | 2.50 | 2.10 | 1.90 | [illegible] | ...... | 1.55 | 1.50 | ...... |
| 10 | ...... | [illegible] | [illegible] | 2.20 | 2.50 | 2.10 | 1.90 | [illegible] | ...... | 1.50 | 1.50 | ...... |
| 11 | ...... | [illegible] | [illegible] | 2.20 | 2.50 | 2.10 | 1.90 | [illegible] | ...... | 1.50 | 1.50 | ...... |
| 12 | ...... | [illegible] | [illegible] | [illegible] | 2.50 | 2.10 | 1.90 | [illegible] | ...... | 1.50 | 1.50 | 1.35 |
| 13 | ...... | [illegible] | [illegible] | [illegible] | 2.50 | 2.10 | 1.90 | [illegible] | ...... | 1.50 | 1.50 | 1.35 |
| 14 | ...... | ...... | [illegible] | [illegible] | 2.50 | 2.20 | 1.90 | [illegible] | ...... | 1.50 | 1.50 | 1.34 |
| 15 | ...... | ...... | [illegible] | [illegible] | 2.40 | 2.20 | 2.00 | 3.05 | 3.00 | 1.51 | 1.50 | [illegible] |
| 16 | ...... | [illegible] | [illegible] | 1.65 | 2.30 | 2.20 | 2.00 | 3.05 | 2.85 | 1.58 | 1.50 | [illegible] |
| 17 | ...... | [illegible] | [illegible] | 1.75 | 2.25 | [illegible] | 2.00 | 2.85 | 2.70 | 1.50 | 1.46 | [illegible] |
| 18 | ...... | [illegible] | [illegible] | [illegible] | 2.20 | [illegible] | [illegible] | 2.58 | [illegible] | 1.50 | 1.46 | [illegible] |
| 19 | ...... | [illegible] | [illegible] | [illegible] | 2.20 | 2.00 | [illegible] | 2.75 | 1.70 | 1.40 | 1.45 | [illegible] |
| 20 | ...... | [illegible] | [illegible] | [illegible] | 2.20 | 2.00 | 2.10 | 2.75 | 1.78 | 1.30 | 1.45 | 1.31 |
| 21 | ...... | [illegible] | [illegible] | 1.90 | 2.10 | 2.00 | 2.10 | 2.65 | [illegible] | 1.60 | 1.45 | 1.35 |
| 22 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 2.00 | [illegible] | 2.60 | [illegible] | 1.54 | 1.42 | [illegible] |
| 23 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 2.00 | [illegible] | 2.60 | 2.01 | 1.50 | ...... | [illegible] |
| 24 | 1.23 | [illegible] | [illegible] | [illegible] | [illegible] | 2.00 | [illegible] | [illegible] | 2.12 | 1.50 | ...... | [illegible] |
| 25 | 1.23 | [illegible] | [illegible] | 2.20 | [illegible] | 2.00 | 2.25 | 2.50 | 2.18 | ...... | ...... | [illegible] |
| 26 | 1.23 | [illegible] | [illegible] | 2.30 | 2.00 | 2.00 | 2.25 | 2.55 | [illegible] | ...... | ...... | [illegible] |
| 27 | 1.13 | [illegible] | [illegible] | [illegible] | 2.00 | 2.00 | [illegible] | [illegible] | [illegible] | ...... | ...... | [illegible] |
| 28 | 1.23 | [illegible] | 1.75 | [illegible] | 2.00 | 2.00 | 2.70 | [illegible] | 2.40 | ...... | ...... | [illegible] |
| 29 | 1.23 | [illegible] | [illegible] | 2.35 | ...... | 2.00 | 2.50 | [illegible] | 2.48 | ...... | ...... | [illegible] |
| 30 | 1.23 | 1.30 | [illegible] | 2.40 | ...... | 2.00 | [illegible] | [illegible] | 2.96 | ...... | ...... | [illegible] |
| 31 | 1.13 | ...... | 1.30 | 2.40 | ...... | 2.00 | ...... | ...... | ...... | ...... | ...... | ...... |
| 1903–4. | | | | | | | | | | | | |
| 1 | [illegible] | 1.44 | 1.30 | 1.52 | [illegible] | [illegible] | 2.13 | 2.12 | 3.15 | 3.10 | 2.25 | 1.90 |
| 2 | [illegible] | 1.43 | 1.30 | [illegible] | [illegible] | 2.47 | 2.12 | 2.14 | 3.12 | 3.12 | 2.25 | 1.90 |
| 3 | [illegible] | 1.42 | [illegible] | [illegible] | 1.70 | [illegible] | 2.11 | 2.14 | 3.10 | [illegible] | 2.25 | 1.90 |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | 1.70 | [illegible] | 2.10 | [illegible] | [illegible] | 2.96 | 2.25 | 1.90 |
| 5 | 1.40 | [illegible] | [illegible] | [illegible] | 1.72 | [illegible] | 2.10 | 2.18 | 3.15 | 2.98 | 2.25 | 1.90 |
| 6 | [illegible] | 1.70 | [illegible] | [illegible] | ...... | [illegible] | 2.10 | [illegible] | [illegible] | 2.95 | 2.25 | 1.90 |
| 7 | [illegible] | 1.70 | 1.48 | [illegible] | ...... | [illegible] | 2.10 | [illegible] | 3.31 | 2.95 | 2.25 | 1.90 |
| 8 | [illegible] | 1.49 | 1.48 | [illegible] | ...... | [illegible] | 2.10 | [illegible] | 3.34 | 2.95 | 2.25 | 1.90 |
| 9 | [illegible] | 1.48 | 1.48 | [illegible] | ...... | 2.78 | 2.10 | [illegible] | 3.31 | 2.95 | 2.25 | 1.90 |
| 10 | [illegible] | 1.48 | 1.45 | [illegible] | 1.50 | ...... | [illegible] | [illegible] | 3.25 | 2.92 | 1.95 | 1.90 |
| 11 | 1.37 | 1.40 | 1.35 | 1.60 | 1.38 | ...... | 2.11 | 3.00 | 3.20 | 2.92 | 1.95 | 1.90 |
| 12 | [illegible] | [illegible] | 1.44 | ...... | ...... | 2.40 | [illegible] | [illegible] | [illegible] | 2.98 | 1.95 | 1.90 |
| 13 | 1.41 | 2.10 | [illegible] | 1.40 | ...... | 2.72 | [illegible] | [illegible] | [illegible] | 2.90 | 1.95 | 1.90 |
| 14 | 1.41 | ...... | 1.42 | 1.40 | ...... | 2.46 | [illegible] | 3.14 | 3.25 | 2.90 | 1.95 | 1.75 |
| 15 | 1.41 | 2.00 | 1.42 | [illegible] | ...... | 2.60 | 3.12 | [illegible] | 3.15 | 2.90 | 1.95 | 1.75 |
| 16 | 1.41 | 2.70 | 1.45 | [illegible] | ...... | [illegible] | 2.91 | 3.30 | 3.15 | 2.70 | 1.95 | 1.75 |
| 17 | 1.46 | 2.21 | 1.45 | [illegible] | 2.40 | [illegible] | 2.52 | [illegible] | 3.16 | 2.65 | 1.95 | 1.75 |
| 18 | 1.50 | 2.12 | 1.46 | [illegible] | 2.70 | 2.38 | 2.52 | [illegible] | 3.18 | 2.55 | 1.92 | 1.75 |
| 19 | [illegible] | [illegible] | 1.45 | [illegible] | 2.40 | 2.40 | 2.58 | 3.19 | 3.05 | 2.34 | 2.00 | 1.75 |
| 20 | [illegible] | 2.25 | 1.34 | [illegible] | [illegible] | 2.70 | 2.60 | 3.10 | 2.95 | 2.25 | 1.95 | 1.75 |
| 21 | 1.70 | 2.65 | 1.38 | 1.30 | 1.34 | 2.94 | 2.60 | 3.10 | 2.95 | 2.25 | 1.90 | 1.75 |
| 22 | 1.70 | 2.70 | 1.42 | 1.30 | 2.48 | 2.44 | 2.45 | 3.25 | 2.90 | 2.25 | 1.90 | 1.75 |
| 23 | 1.70 | 2.90 | 1.37 | 1.30 | 2.36 | 2.94 | 2.51 | 3.12 | 3.00 | 2.25 | 1.90 | 1.75 |
| 24 | 1.70 | 2.35 | 1.30 | 1.30 | ...... | ...... | 2.48 | 3.30 | 3.10 | 2.30 | 1.90 | 1.75 |
| 25 | 2.25 | 2.42 | 1.30 | 1.70 | ...... | 2.94 | 2.46 | 3.42 | 3.05 | 2.30 | 1.85 | 1.75 |
| 26 | 2.20 | 2.20 | 1.30 | 1.70 | ...... | 2.94 | 2.42 | 3.42 | 3.00 | 2.30 | 1.85 | 1.75 |
| 27 | 1.90 | 2.10 | 1.30 | 1.70 | ...... | 2.48 | 2.30 | 3.30 | 3.00 | 2.50 | 1.85 | 1.75 |
| 28 | 1.80 | 1.95 | 1.30 | 1.40 | 2.90 | 2.55 | 2.14 | 3.30 | 3.00 | 2.30 | 1.85 | 1.90 |
| 29 | 1.72 | 1.90 | 1.30 | 1.40 | 2.75 | 2.70 | 2.14 | 3.20 | 3.05 | 2.30 | 1.80 | 1.90 |
| 30 | 1.65 | 1.90 | 1.30 | 1.40 | ...... | 2.40 | 2.12 | 3.30 | 3.05 | 2.35 | 1.90 | 1.80 |
| 31 | 1.65 | ...... | 1.30 | 1.60 | ...... | 2.14 | ...... | 3.20 | ...... | 2.35 | 1.90 | ...... |

*Daily gage height, in feet, of Independence Creek below Independence Lake, Cal., for 1902–1907*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 1 | 1.80 | 2.15 | 3.20 | 2.1 | 2.7 | 2.5 | 2.7 | 3.28 | 3.2 | 1.88 | 2.0 | 1.65 |
| 2 | 1.80 | 2.10 | 3.10 | 2.1 | 2.58 | 2.5 | 2.7 | 3.5 | 3.2 | 2.0 | 2.0 | 1.65 |
| 3 | 1.80 | 2.10 | 3.10 | 2.15 | 2.4 | 2.5 | 2.45 | 3.5 | 3.1 | 2.1 | 2.0 | 1.65 |
| 4 | 1.80 | 2.10 | 3.10 | 2.15 | 2.3 | 2.5 | 2.25 | 3.5 | 3.1 | 2.2 | 2.0 | 1.65 |
| 5 | 1.85 | 2.10 | 2.90 | 2.15 | 2.2 | 2.5 | 2.25 | 3.5 | 3.1 | 2.25 | 2.0 | 1.65 |
| 6 | 1.90 | 2.10 | 2.85 | 2.18 | 2.2 | 2.5 | 2.25 | 3.35 | 3.1 | 2.3 | 2.0 | 1.65 |
| 7 | 1.98 | 2.10 | 2.85 | 2.2 | 2.2 | 2.5 | 2.25 | 3.15 | 3.05 | 2.3 | 1.95 | 1.65 |
| 8 | 2.00 | 2.00 | 2.80 | 2.2 | 2.2 | 2.5 | 2.28 | 3.1 | 3.08 | 2.3 | 1.95 | 1.65 |
| 9 | 2.35 | 2.00 | 2.80 | 2.2 | 2.2 | 2.5 | 2.3 | 3.05 | 3.1 | 2.3 | 1.95 | 1.65 |
| 10 | 2.45 | 2.00 | 2.62 | 2.2 | 2.2 | 2.5 | 2.3 | 3.15 | 3.15 | 2.25 | 1.96 | 1.65 |
| 11 | 2.80 | 2.00 | 2.15 | 2.22 | 2.2 | 2.5 | 2.3 | 2.7 | 3.18 | 2.25 | 1.9 | 1.65 |
| 12 | 2.70 | 2.00 | 2.10 | 2.25 | 2.2 | 2.5 | 2.3 | 2.7 | 3.2 | 2.25 | 1.9 | 1.6 |
| 13 | 3.30 | 2.00 | 2.10 | 2.32 | 2.2 | 2.5 | 2.3 | 2.7 | 3.2 | 2.2 | 1.9 | 1.6 |
| 14 | 3.05 | 2.00 | 2.10 | 2.52 | 2.22 | 2.5 | 2.3 | 2.7 | 3.2 | 2.18 | 1.9 | 1.6 |
| 15 | 2.60 | 2.00 | 2.10 | 2.6 | 2.25 | 2.5 | 2.3 | 2.7 | 3.22 | 2.1 | 1.9 | 1.6 |
| 16 | 2.40 | 2.00 | 2.10 | 2.6 | 2.25 | 2.5 | 2.3 | 2.7 | 3.22 | 2.1 | 1.85 | 1.6 |
| 17 | 2.20 | 2.00 | 2.10 | 2.6 | 2.25 | 2.5 | 2.3 | 2.88 | 3.2 | 2.1 | 1.85 | 1.55 |
| 18 | 2.15 | 2.00 | 2.10 | 2.62 | 2.25 | 2.5 | 2.65 | 3.08 | 3.2 | 2.05 | 1.85 | 1.55 |
| 19 | 2.15 | 2.00 | 2.00 | 2.65 | 2.38 | 2.5 | 3.05 | 3.08 | 3.2 | 2.05 | 1.85 | 1.55 |
| 20 | 2.15 | 2.00 | 1.95 | 2.68 | 2.48 | 2.6 | 3.05 | 3.28 | 3.2 | 2.05 | 1.85 | 1.55 |
| 21 | 2.15 | 2.00 | 1.95 | 2.88 | 2.5 | 2.7 | 3.05 | 3.45 | 3.15 | 2.08 | 1.85 | 1.55 |
| 22 | 2.15 | 2.00 | 1.95 | 2.98 | 2.5 | 2.7 | 3.2 | 3.45 | 3.15 | 2.1 | 1.85 | 1.55 |
| 23 | 2.20 | 2.00 | 1.90 | 2.98 | 2.5 | 2.7 | 3.1 | 3.45 | 3.15 | 2.15 | 1.85 | 1.55 |
| 24 | 2.20 | 2.00 | 1.90 | 3.02 | 2.5 | 2.7 | 3.1 | 3.0 | 3.1 | 2.2 | 1.8 | 1.55 |
| 25 | 2.20 | 2.00 | 1.98 | 3.12 | 2.5 | 2.8 | 3.1 | 2.55 | 3.08 | 2.2 | 1.75 | 1.55 |
| 26 | 2.20 | 2.00 | 2.08 | 3.25 | 2.5 | 2.72 | 3.1 | 2.55 | 2.4 | 2.15 | 1.75 | 1.55 |
| 27 | 2.20 | 2.00 | 2.10 | 3.25 | 2.5 | 2.75 | 3.1 | 2.55 | 1.8 | 2.1 | 1.7 | 1.55 |
| 28 | 2.20 | 2.00 | 2.10 | 3.08 | 2.5 | 2.75 | 3.1 | 3.05 | 1.8 | 2.1 | 1.7 | 1.5 |
| 29 | 2.15 | 2.00 | 2.10 | 2.85 | ...... | 2.75 | 3.1 | 3.08 | 1.82 | 2.05 | 1.68 | 1.5 |
| 30 | 2.15 | 2.60 | 2.10 | 2.85 | ...... | 2.75 | 3.1 | 3.18 | 1.88 | 2.05 | 1.65 | 1.5 |
| 31 | 2.15 | ...... | 2.10 | 2.85 | ...... | 2.75 | ...... | 3.2 | ...... | 2.05 | 1.65 | ...... |
| **1905–6.** | | | | | | | | | | | | |
| 1 | 1.5 | 1.5 | 2.18 | 1.98 | 1.95 | 2.58 | 2.58 | 2.80 | 1.52 | 3.45 | 2.62 | 2.25 |
| 2 | 1.5 | 1.5 | 2.15 | 1.95 | 1.90 | 2.50 | 2.52 | 2.92 | 1.96 | 3.52 | 2.60 | 2.25 |
| 3 | 1.5 | 1.45 | 2.12 | 1.90 | 1.90 | 2.50 | 2.48 | 3.00 | 2.20 | 3.62 | 2.62 | 2.20 |
| 4 | 1.5 | 1.45 | 2.1 | 1.90 | 1.90 | 2.50 | 2.40 | 3.50 | 2.80 | 3.62 | 2.58 | 2.20 |
| 5 | 1.5 | 1.45 | 2.3 | 1.90 | 1.90 | 2.48 | 2.38 | 3.12 | 3.40 | 3.72 | 2.68 | 2.20 |
| 6 | 1.5 | 1.45 | 2.5 | 1.90 | 1.90 | 2.40 | 2.32 | 3.18 | 3.48 | 3.68 | 2.65 | 2.20 |
| 7 | 1.5 | 1.45 | 2.25 | 1.88 | 1.90 | 2.38 | 2.30 | 3.22 | 3.42 | 3.75 | 2.62 | 2.20 |
| 8 | 1.5 | 1.45 | 2.0 | 1.85 | 1.90 | 2.35 | 2.30 | 3.60 | 3.50 | 3.80 | 2.50 | 2.18 |
| 9 | 1.5 | 1.45 | 2.0 | 1.90 | 1.90 | 2.22 | 2.30 | 3.50 | 3.50 | 3.72 | 2.62 | 2.10 |
| 10 | 1.5 | 1.38 | 1.98 | 1.85 | 1.85 | 2.30 | 2.38 | 3.50 | 3.45 | 3.50 | 2.60 | 2.10 |
| 11 | 1.5 | 2.35 | 1.96 | 1.85 | 1.85 | 2.25 | 2.40 | 3.50 | 3.58 | 3.40 | 2.65 | 2.10 |
| 12 | 1.5 | 2.3 | 1.95 | 1.92 | 1.85 | 2.60 | 2.38 | 3.42 | 3.60 | 3.42 | 2.50 | 2.10 |
| 13 | 1.5 | 2.25 | 1.92 | 2.48 | 1.85 | 2.72 | 2.35 | 3.40 | 3.60 | 3.48 | 2.48 | 2.10 |
| 14 | 1.5 | 2.2 | 1.9 | 2.78 | 1.88 | 2.75 | 2.85 | 3.40 | 3.60 | 3.50 | 2.48 | 2.05 |
| 15 | 1.5 | 2.2 | 1.88 | 2.88 | 2.25 | 2.80 | 2.85 | 3.35 | 3.60 | 3.48 | 2.42 | 2.05 |
| 16 | 1.5 | 2.15 | 1.88 | 2.98 | 2.25 | 2.78 | 2.40 | 3.30 | 3.00 | 3.45 | 2.42 | 2.05 |
| 17 | 1.5 | 2.15 | 1.85 | 3.08 | 2.00 | 2.70 | 2.45 | 3.25 | 3.30 | 3.42 | 2.45 | 2.05 |
| 18 | 1.5 | 2.1 | 1.85 | 3.35 | 2.35 | 2.62 | 2.50 | 3.18 | 3.45 | 3.45 | 2.42 | 2.05 |
| 19 | 1.5 | 2.1 | 1.9 | 3.30 | 2.10 | 2.52 | 2.58 | 3.15 | 3.62 | 3.42 | 2.40 | 2.05 |
| 20 | 1.5 | 2.15 | 1.9 | 3.20 | 2.15 | 2.50 | 2.00 | 3.15 | 3.50 | 3.28 | 2.45 | 2.02 |
| 21 | 1.5 | 2.1 | 1.9 | 3.08 | 2.40 | 2.50 | 2.72 | 3.15 | 3.60 | 2.68 | 2.42 | 2.00 |
| 22 | 1.5 | 2.1 | 1.85 | 2.98 | 2.65 | 2.50 | 2.82 | 3.15 | 3.68 | 2.75 | 2.42 | 2.00 |
| 23 | 1.5 | 2.1 | 1.86 | 2.82 | 2.70 | 2.52 | 2.88 | 3.15 | 3.75 | 3.22 | 2.32 | 2.00 |
| 24 | 1.5 | 2.5 | 1.82 | 2.78 | 2.62 | 2.52 | 2.90 | 3.12 | 3.82 | 3.52 | 2.30 | 2.00 |
| 25 | 1.5 | 2.5 | 1.84 | 2.60 | 2.58 | 2.56 | 2.85 | 3.18 | 3.85 | 3.48 | 2.30 | 2.00 |
| 26 | 1.5 | 2.25 | 1.8 | 2.58 | 2.50 | 2.52 | 2.80 | 3.20 | 3.78 | 2.90 | 2.30 | 2.00 |
| 27 | 1.5 | 2.12 | 1.85 | 2.52 | 2.52 | 2.48 | 2.80 | 3.28 | 3.75 | 2.91 | 2.30 | 2.00 |
| 28 | 1.5 | 2.15 | 1.85 | 2.42 | 2.60 | 2.42 | 2.80 | 3.25 | 3.72 | 2.60 | 2.25 | 2.00 |
| 29 | 1.5 | 2.2 | 1.9 | 2.32 | ...... | 2.38 | 2.75 | 3.18 | 3.60 | 2.58 | 2.25 | 2.00 |
| 30 | 1.5 | 2.2 | 1.9 | 2.12 | ...... | 2.38 | 2.75 | 2.15 | 3.48 | 2.68 | 2.25 | 1.95 |
| 31 | 1.5 | ...... | 1.98 | 1.95 | ...... | 2.52 | ...... | 2.15 | ...... | 2.65 | 2.25 | ...... |

*Daily gage height, in feet, of Independence Creek below Independence Lake, Cal., for 1902–1907*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | | | | |
| 1 | 1.95 | 2.20 | 2.28 | 2.8 | 2.8 | 2.7 | 2.55 | 3.25 | 3.7 |
| 2 | 1.95 | 2.22 | 2.25 | 2.5 | 2.9 | 2.7 | 2.6 | 3.3 | 3.7 |
| 3 | 1.95 | 2.30 | 2.25 | 2.5 | 2.9 | 2.7 | 2.6 | 3.25 | 3.75 |
| 4 | 1.95 | 2.40 | 2.25 | 2.6 | 2.9 | 2.7 | 2.6 | 3.25 | 3.75 |
| 5 | 1.95 | 2.45 | 2.25 | 2.7 | 2.9 | 2.7 | 2.6 | 3.25 | 3.75 |
| 6 | 1.95 | 2.42 | 2.25 | 2.8 | 2.9 | 2.7 | 2.65 | 3.2 | 3.75 |
| 7 | 1.95 | 2.42 | 2.25 | 2.8 | 2.8 | 2.7 | 2.65 | 3.2 | 3.7 |
| 8 | 1.95 | 2.40 | 2.30 | 2.9 | 2.85 | 2.7 | 2.65 | 3.2 | 3.7 |
| 9 | 1.92 | 2.40 | 2.35 | 2.9 | 2.85 | 2.65 | 2.6 | 3.2 | 3.45 |
| 10 | 1.90 | 2.40 | 2.42 | 3.0 | 2.8 | 2.7 | 2.65 | 3.3 | 3.35 |
| 11 | 1.90 | 2.40 | 2.40 | 2.95 | 2.8 | 2.8 | 2.7 | 3.35 | 3.4 |
| 12 | 1.90 | 2.40 | 3.80 | 3.0 | 2.75 | 2.8 | 2.7 | 3.4 | 3.5 |
| 13 | 1.90 | 2.38 | 3.50 | 3.0 | 2.75 | 2.75 | 2.8 | 3.35 | 3.3 |
| 14 | 1.90 | 2.55 | 2.95 | 3.0 | 2.75 | 2.7 | 3.1 | 3.35 | 3.15 |
| 15 | 1.90 | 2.38 | 2.90 | 3.0 | 2.75 | 2.7 | 3.35 | 3.3 | 3.15 |
| 16 | 1.90 | 2.42 | 2.85 | 2.95 | 2.7 | 2.7 | 3.3 | 3.3 | 3.15 |
| 17 | 1.85 | 2.38 | 2.80 | 3.0 | 2.7 | 2.9 | 3.2 | 3.4 | 3.2 |
| 18 | 1.85 | 2.35 | 2.52 | 2.9 | 2.65 | 3.35 | 3.2 | 3.4 | 3.2 |
| 19 | 1.85 | 2.35 | 2.30 | 2.9 | 2.65 | 3.55 | 3.2 | 3.5 | 3.3 |
| 20 | 2.48 | 2.35 | 2.30 | 2.8 | 2.6 | 3.5 | 3.2 | 3.55 | 3.4 |
| 21 | 3.50 | 2.35 | 2.30 | 2.75 | 2.6 | 3.5 | 3.2 | 3.55 | 3.45 |
| 22 | 2.98 | 2.35 | 2.30 | 2.7 | 2.65 | 3.4 | 3.2 | 3.5 | 3.75 |
| 23 | 2.92 | 2.35 | 2.35 | 2.7 | 2.6 | 3.4 | 3.2 | 3.5 | 3.9 |
| 24 | 2.82 | 2.32 | 2.38 | 2.7 | 2.6 | 3.4 | 3.2 | 3.4 | 3.4 |
| 25 | 2.75 | 2.30 | 2.40 | 2.7 | 2.65 | 3.4 | 3.3 | 3.4 | 3.3 |
| 26 | 2.72 | 2.30 | 2.45 | 2.7 | 2.65 | 3.35 | 3.3 | 3.4 | 3.2 |
| 27 | 2.62 | 2.30 | 2.50 | 2.65 | 2.65 | 3.2 | 3.3 | 3.4 | 3.45 |
| 28 | 2.15 | 2.30 | 2.50 | 2.7 | 2.65 | 3.1 | 3.3 | 3.4 | 3.6 |
| 29 | 2.20 | 2.30 | 2.50 | 2.7 | ........ | 3.05 | 3.3 | 3.5 | 3.55 |
| 30 | 2.20 | 2.30 | 2.40 | 2.7 | ........ | 2.6 | 3.3 | 3.55 | 3.55 |
| 31 | 2.20 | ........ | 2.18 | 2.7 | ........ | 2.55 | ........ | 3.6 | ........ |

*Monthly discharge of Independence Creek below Independence Lake, Cal., for 1902–1907.*

[Drainage area, 8.5 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| 1902–3. | | | | | | | |
| October 24–31 | 1.1 | 0.2 | 0.46 | 0.054 | 0.02 | 7 | B. |
| November | 14 | .2 | 9.50 | 1.12 | 1.25 | 565 | B. |
| December | 27 | 2.8 | 8.01 | .942 | 1.09 | 493 | B. |
| January | 41 | 4.4 | 17.9 | 2.11 | 2.43 | 1,100 | B. |
| February | 50 | 17 | 37.2 | 4.38 | 4.56 | 2,070 | B. |
| March | 27 | 17 | 19.7 | 2.32 | 2.68 | 1,210 | A. |
| April | 88 | 13 | 26.1 | 3.07 | 3.42 | 1,550 | A. |
| May | 154 | 52 | 92.6 | 10.9 | 12.57 | 5,690 | A. |
| June | 149 | 9.2 | 73.2 | 8.61 | 9.61 | 4,360 | C. |
| July | 124 | 4.7 | 19.3 | 2.27 | 2.62 | 1,190 | C. |
| August | 4.9 | .9 | 3.56 | .419 | .48 | 219 | C. |
| September | .9 | .4 | .73 | .086 | .10 | 43 | C. |
| The period | ........ | ........ | ........ | ........ | ........ | 18,500 | |

*Monthly discharge of Independence Creek below Independence Lake, Cal., for 1903-1907*—Continued.

[Drainage area, 8.5 square miles.]

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Per square mile. | Run-off. Depth in inches on drainage area. | Total in acre-feet. | Accuracy. |
|---|---|---|---|---|---|---|---|
| **1903-4.** | | | | | | | |
| October | 27 | .6 | 3.22 | .379 | .44 | 198 | A. |
| November | 99 | 1.2 | 28.0 | 3.29 | 3.67 | 1,670 | A. |
| December | 10 | 2.0 | 6.35 | .300 | .98 | 408 | B. |
| January | 10 | 2.3 | 6.26 | .734 | .85 | 384 | B. |
| February | 95 | 4.8 | 39.7 | 4.67 | 5.04 | 2,280 | B. |
| March | 95 | 21 | 56.5 | 6.65 | 7.67 | 3,470 | A. |
| April | 145 | 29 | 42.4 | 4.97 | 5.43 | 2,480 | B |
| May | 208 | 29 | 128 | 15.1 | 17.42 | 7,870 | B. |
| June | 176 | 60 | 114 | 13.4 | 14.95 | 6,780 | B. |
| July | 165 | 12 | 43.7 | 5.14 | 5.93 | 2,690 | A. |
| August | 12 | 2.6 | 5.97 | .702 | .81 | 367 | A. |
| September | 2.6 | 2.2 | 2.41 | .284 | .32 | 143 | A. |
| The year | 208 | .6 | 39.9 | 4.68 | 63.45 | 28,700 | |
| **1904-5.** | | | | | | | |
| October | 102 | 2.6 | 19.6 | 2.31 | 2.66 | 1,210 | A. |
| November | 35 | 4.6 | 6.13 | .721 | .80 | 365 | A. |
| December | 130 | 3.4 | 29.0 | 3.41 | 3.93 | 1,790 | B. |
| January | 145 | 6.6 | 44.3 | 5.21 | 6.01 | 2,720 | B. |
| February | 44 | 9.6 | 18.4 | 2.16 | 2.25 | 1,020 | B. |
| March | 54 | 27 | 34.5 | 4.06 | 4.68 | 2,120 | A. |
| April | 130 | 12 | 53.0 | 6.24 | 6.96 | 3,150 | A. |
| May | 232 | 31 | 123 | 13.9 | 16.08 | 7,560 | B. |
| June | 126 | 2.6 | 99.9 | 11.8 | 13.17 | 5,940 | A. |
| July | 14 | 3.2 | 8.41 | .989 | 1.14 | 517 | A. |
| August | 4.4 | .4 | 2.42 | .285 | .33 | 149 | B. |
| September | .4 | .0 | .22 | .026 | .03 | 13 | C. |
| The year | 232 | .0 | 36.2 | 4.26 | 57.90 | 26,200 | |
| **1905-6.** | | | | | | | |
| October | .0 | .0 | .0 | .00 | .00 | 0 | D. |
| November | 17 | .0 | 4.90 | .576 | .64 | 292 | C. |
| December | 17 | 1.1 | 3.37 | .396 | .46 | 207 | B. |
| January | 117 | 1.6 | 27.2 | 3.20 | 3.69 | 1,670 | B. |
| February | 29 | 1.6 | 8.33 | .980 | 1.02 | 463 | B. |
| March | 37 | 8.0 | 18.6 | 2.19 | 2.52 | 1,140 | A. |
| April | 46 | 9.3 | 21.9 | 2.58 | 2.88 | 1,300 | A. |
| May | 154 | 5.6 | 89.7 | 10.6 | 12.22 | 5,520 | B. |
| June | 208 | .0 | 159 | 18.7 | 20.86 | 9,460 | B. |
| July | 290 | 21 | 141 | 16.6 | 19.14 | 8,670 | B. |
| August | 28 | 8.0 | 16.0 | 1.88 | 2.17 | 984 | A. |
| September | 8 | 2.6 | 4.55 | .535 | .60 | 271 | A. |
| The year | 290 | .0 | 41.2 | 4.85 | 66.15 | 30,000 | |
| **1906-7.** | | | | | | | |
| October | 154 | 1.6 | 15.0 | 1.76 | 2.03 | 922 | A. |
| November | 15 | 6.6 | 11.5 | 1.35 | 1.51 | 684 | A. |
| December | 290 | 6.2 | 27.9 | 3.27 | 3.77 | 1,710 | B. |
| January | 56 | 17 | 37.9 | 4.46 | 5.14 | 2,330 | B. |
| February | 46 | 22 | 32.9 | 3.87 | 4.03 | 1,830 | B. |
| March | 160 | 20 | 64.9 | 7.64 | 8.81 | 3,990 | B. |
| April | 117 | 29 | 65.1 | 7.66 | 8.55 | 3,870 | A. |
| May | 184 | 87 | 124 | 14.6 | 16.83 | 7,620 | B. |
| June | 288 | 78 | 158 | 18.6 | 20.75 | 9,400 | B. |
| July | ........ | ........ | a 64 | 7.53 | 8.68 | 3,940 | D. |
| August | ........ | ........ | a 21 | 2.47 | 2.85 | 1,290 | D. |
| September | ........ | ........ | a 13 | 1.53 | 1.71 | 774 | D. |
| The year | 296 | ........ | 52.9 | 6.22 | 84.66 | 38,400 | |

a Estimated as 14 per cent of discharge of Little Truckee River at Starr, this being a mean ratio derived by comparison of records; results are approximate.

NOTE.—Discharge determined from rating curves applicable as follows: Oct. 24, 1902, to May 15, 1903; May 16 to Aug. 22, 1903; Aug. 27, 1903, to May 25, 1904; May 26, 1904, to July 8, 1905; July 9 to Sept. 30, 1905; and Oct. 1, 1905, to June 30, 1907. All are fairly well defined between 0.5 and 130 second-feet except the last, which is not well defined for 1907.

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made on streams in the Truckee River basin:

*Miscellaneous measurements in Truckee River basin.*

**Streams flowing into Lake Tahoe.**

| Stream. | Discharge. |
|---|---|
| *Made by L. H. Taylor, May 5–10, 1900.* | *Sec.-feet.* |
| Ward Creek | 147 |
| Blackwood Creek | 140 |
| Threesmall streams between Idyllwild and McKinney Creek | [a] 12 |
| McKinney Creek | 150 |
| General Creek | 100 |
| Meeks Creek | 130 |
| Five small streams between Meeks Creek and Emerald Bay | [a] 12 |
| Emerald Bay Creek | 60 |
| Cascade Creek | 30 |
| Taylor Creek | 160 |
| Upper Truckee River | 360 |
| Ten small streams between Bijou and Glen Brook, in Nevada | [a] 15 |
| *Made by G. B. Lorenz, Aug. 1–5, 1908.* | |
| Ward Creek | 5.8 |
| Blackwood Creek | 7.3 |
| Madden Creek | .3 |
| Unnamed creek | Trace. |
| McKinney Creek | .4 |
| General Creek | 1.2 |
| Meeks Creek | 2.7 |
| Lonely Gulch Creek | 1.0 |
| Frosts Creek | 2.3 |
| Unnamed creek | .9 |
| Do | 1.0 |
| Emerald Bay Creek | 8.4 |
| Cascade Creek | 4.3 |
| Trout Creek | 29 |
| Little Truckee River | 43 |
| Zephyr Cove | Trace. |
| Unnamed creek | 1.0 |
| Unnamed creek (south of Cave Rock) | .1 |
| Unnamed creek (north of Glenbrook) | 1.1 |
| Unnamed creek (at Glenbrook) | 0.6 |
| Unnamed creek | Trace. |
| Do | 1.2 |
| Unnamed creek (at breakwater) | .5 |
| Unnamed creek (south of Incline) | .5 |
| Incline Creek | 1.3 |
| Unnamed creek (west of Incline) | 1.8 |
| Do | .9 |
| Do | 1.0 |
| Do | 1.0 |
| Unnamed creek (west of Brockway) | .8 |
| Unnamed creek (east of Woodward) | Trace. |
| *Made by Cox and Jorgensen, June 26–27, 1909.* | |
| Ward Creek | 136 |
| Blackwood Creek | 193 |
| Madden Creek | 38 |
| Three small streams between Madden and McKinney creeks | 19 |
| McKinney Creek | 29 |
| General Creek | 44 |
| Meeks Creek | [a] 50 |
| Three small streams between Meeks and Eagle creeks | [a] 35 |
| Eagle Creek | 128 |
| Cascade Creek | 69 |
| Taylor Creek | 200 |
| Upper Truckee River | 360 |
| Trout Creek | 172 |
| Stream between Trout Creek and Glenbrook Bay | [a] 5 |
| Two streams flowing into Glenbrook Bay | 5 |
| Streams between Glenbrook Bay and Tahoe outlet | [a] 40 |

[a] Estimated.

*Miscellaneous measurements in Truckee River basin—Continued.*

Truckee River and tributaries.

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | Sec.-feet. |
| July 9, 19[illegible] | Truckee River | [illegible] | [illegible] |
| Aug. 8, 19[illegible] | do | do. | [illegible] |
| Aug. 14, 19[illegible] | do | do. | [illegible] |
| Aug. 18, 19[illegible] | do | do. | [illegible] |
| June 3, 19[illegible] | do | [illegible] Truckee | [illegible] |
| June 12, 19[illegible] | do | do. | [illegible] |
| May 19, 19[illegible] | Little Truckee River | [illegible] | [illegible] |
| June 6, 19[illegible] | do | do. | [illegible] |
| Aug. 16, 19[illegible] | do | do. | [illegible] |
| Sept. 15, 19[illegible] | do | do. | [illegible] |
| Sept. 21, 1910 | Alder Creek | Near [illegible] | [illegible] |
| Aug. 5, 1911 | do | do. | [illegible] |
| Sept. 26, 1911 | do | do. | [illegible] |
| May 31, 19[illegible] | do | [illegible] | [illegible] |
| May 19, 19[illegible] | do | do. | [illegible] |
| July 25, 19[illegible] | do | do. | [illegible] |
| Sept. 10, 19[illegible] | do | do. | [illegible] |
| June 28, 19[illegible] | Cold Creek | [illegible] Donner Lake | [illegible] |
| July 3, 19[illegible] | do | do. | [illegible] |
| July 6, 19[illegible] | do | do. | [illegible] |
| July 11, 19[illegible] | do | do. | [illegible] |
| Aug. 7, 19[illegible] | do | do. | [illegible] |
| Aug. 10, 19[illegible] | do | do. | [illegible] |
| Aug. 17, 19[illegible] | do | do. | [illegible] |
| June 16, 19[illegible] | Deer Creek | [illegible] | [illegible] |
| May 22, 19[illegible] | Dog Creek | [illegible] | [illegible] |
| July 26, 19[illegible] | do | do. | [illegible] |
| Sept. 10, 19[illegible] | do | do. | [illegible] |
| Oct. 7, 1912 | do | do. | [illegible] |
| July 3, 19[illegible] | Donner Creek | [illegible] | [illegible] |
| July 6, 19[illegible] | do | [illegible] | [illegible] |
| July 11, 19[illegible] | do | [illegible] | [illegible] |
| July 16, 19[illegible] | do | [illegible] | [illegible] |
| Aug. 7, 19[illegible] | do | [illegible] | [illegible] |
| Aug. 10, 19[illegible] | do | [illegible] | [illegible] |
| Aug. 17, 19[illegible] | do | [illegible] | [illegible] |
| May 16, 19[illegible] | do | Near Donner Lake | [illegible] |
| May 29, 19[illegible] | do | do. | [illegible] |
| July 13, 19[illegible] | do | do. | [illegible] |
| Aug. 20, 19[illegible] | do | do. | [illegible] |
| Sept. 13, 19[illegible] | do | do. | [illegible] |
| May 21, 19[illegible] | do | Near Truckee River | [illegible] |
| June 3, 19[illegible] | do | do. | [illegible] |
| June 12, 19[illegible] | do | do. | [illegible] |
| July 13, 19[illegible] | do | do. | [illegible] |
| Sept. 20, 19[illegible] | do | [illegible] | [illegible] |
| June 7, 19[illegible] | Hunter Creek | [illegible] | [illegible] |
| Sept. 12, 1910 | do | [illegible] | [illegible] |
| Oct. 24, 1912 | Independence Creek | Independence Lake | [illegible] |
| May 31, 19[illegible] | Joe Gray Creek | [illegible] | [illegible] |
| May 19, 19[illegible] | do | do. | [illegible] |
| July 28, 19[illegible] | do | do. | [illegible] |
| Sept. 15, 19[illegible] | do | do. | [illegible] |
| May 30, 19[illegible] | Juniper Creek | [illegible] | [illegible] |
| June 6, 19[illegible] | do | do. | [illegible] |
| Sept. 15, 19[illegible] | do | do. | [illegible] |
| June 1, 19[illegible] | Martis Creek | [illegible] | [illegible] |
| June 22, 19[illegible] | do | [illegible] | [illegible] |
| May 21, 19[illegible] | do | [illegible] | [illegible] |
| June 4, 19[illegible] | do | [illegible] | [illegible] |
| Sept. 14, 19[illegible] | do | [illegible] | [illegible] |
| June 4, 19[illegible] | Prosser Creek | Mouth | [illegible] |
| July 27, 19[illegible] | do | do. | [illegible] |
| Sept. 9, 19[illegible] | do | do. | [illegible] |
| Oct. 23, 19[illegible] | do | Prosser | [illegible] |
| Sept. 27, 19[illegible] | Prosser Creek South | Evans Valley | [illegible] |
| June 3, 19[illegible] | Squaw Creek | Halfway between Lake Tahoe and Truckee. | [illegible] |
| June 22, 19[illegible] | do | do. | 15.0 |
| June 5, 19[illegible] | do | Placer County | [illegible] |
| June 16, 19[illegible] | do | do. | [illegible] |
| Sept. 14, 19[illegible] | do | do. | [illegible] |
| Sept. 19, 19[illegible] | do | Near mouth | 1.3 |
| June 3, 19[illegible] | Creek near Tahoe Tollgate | [illegible] | [illegible] |
| Sept. 21, 19[illegible] | Trout Creek | Near mouth | [illegible] |

a Approximate. b Estimated.

[illegible]

## [illegible] FORK OF [illegible] RIVER AT [illegible]

[illegible] the gage [illegible] at [illegible] by [illegible] different datum. [illegible] is known as the bridge station.

[illegible] the station. [illegible] the amount of water [illegible] gage height and discharge [illegible] The [illegible] gage is a vertical staff [illegible] bridge [illegible] bridge during irrigation season.

[illegible] Engineering Corporation installed a gage [illegible]

Discharge measurements [illegible] made from a car and cable [illegible] the gage.

*Discharge measurements of West Fork of [illegible] River above [illegible], [illegible], in [illegible]*

| Date. | Hydrographer. | Gage height. | Dis-charge. | Date. | Hydrographer. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| [illegible] | | Feet. | Sec.-feet. | 1914. | | Feet. | Sec.-feet. |
| [illegible] | [illegible] | [illegible] | [illegible] | July [illegible] | [illegible] Shaw | 1.85 | 245 |
| [illegible] | do | [illegible] | *[illegible] | [illegible] | do | [illegible] | [illegible] |
| May [illegible] | do | [illegible] | [illegible] | [illegible] | do | 1.55 | [illegible] |
| [illegible] | do | [illegible] | *[illegible] | 25 | do | [illegible] | [illegible] |
| June [illegible] | do | [illegible] | [illegible] | Aug. [illegible] | do | [illegible] | 99 |
| [illegible] | do | 2.[illegible] | [illegible] | [illegible] | do | 2.53 | 83 |
| [illegible] 4 | do | 2.[illegible] | [illegible] | [illegible] | do | 2.65 | 70 |
| | | | | Sept. 4 | do | 2.55 | 64 |
| [illegible] | | | | 22 | do | 2.52 | 49 |
| [illegible] | [illegible] | 2.[illegible] | 152 | Oct. [illegible] | do | 3.15 | 106 |
| May [illegible] | [illegible] | 4.[illegible] | 422 | 1915. | | | |
| [illegible] 4 | [illegible] | 2.[illegible] | 15[illegible] | Apr. [illegible] | W. A. Wolf | 2.85 | 88 |
| [illegible] | do | 2.[illegible] | 47 | [illegible] | do | 3.55 | 196 |
| Aug. [illegible] | [illegible] | 2.4[illegible] | [illegible] | May 2 | J. L. [illegible] | 3.95 | 328 |
| [illegible] | [illegible] | 2.21 | 40 | 12 | do | 3.50 | 210 |
| [illegible] | | | | 16 | do | 4.40 | 398 |
| Apr. 7 | [illegible] | 3.0[illegible] | 97 | 25 | do | 4.15 | 305 |
| [illegible] | A. [illegible] | 3.[illegible] | 153 | 30 | do | 4.00 | 298 |
| June [illegible] | do | 4.[illegible] | 247 | June 7 | do | 3.75 | 223 |
| July [illegible] | do | 3.[illegible] | 12[illegible] | 12 | do | 4.10 | 288 |
| [illegible] | do | 3.[illegible] | 107 | 22 | do | 3.60 | 188 |
| Aug. [illegible] | W. [illegible] | 2.[illegible] | 48 | 28 | do | 3.20 | 119 |
| [illegible] | do | 2.[illegible] | 37 | July 10 | do | 2.90 | 104 |
| | | | | 22 | do | 2.50 | 72 |
| [illegible] | | | | 30 | do | 2.35 | 44 |
| May [illegible] | [illegible] A. Craig | 3.75 | 203 | Aug. 29 | W. A. Wolf | 2.10 | 26 |

* Estimated.

*Discharge measurements of West Fork of Carson River above Woodfords, Cal., in 1901–1909*—Continued.

| Date. | Hydrographer. | Gage height. | Discharge | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | *Feet.* | *Sec.-feet.* | | | *Feet.* | *Sec.-feet.* |
| 1906. | | | | 1908. | | | |
| May 9 | M. B. Kennedy | 6.70 | 1,520 | June 26 | E. A. Porter | 2.07 | 137 |
| 18 | do | 5.10 | 695 | July 25 | do | 1.00 | 55 |
| June 5 | do | 5.20 | 764 | Aug. 31 | M. B. Kennedy | [a] 1.40 | 46 |
| 16 | do | 5.60 | 899 | Oct. 12 | E. A. Porter | .90 | 31 |
| July 17 | do | 4.10 | 373 | | | | |
| Aug. 16 | do | 3.05 | 108 | 1909. | | | |
| | | | | June 16 | L. J. Towne | 3.75 | 467 |
| 1907. | | | | July 8 | do | 2.45 | 203 |
| June 8 | E. A. Porter | 4.30 | 684 | Aug. 10 | do | 1.52 | 60 |
| July 9 | do | 4.00 | 578 | Sept. 10 | F. C. Schafer | .85 | 31 |
| Aug. 3 | do | 2.90 | 229 | Oct. 28 | do | .85 | 28 |

[a] Estimated.

NOTE.—Gage heights 1907-1909 refer to new gage at Woodfords.

*Discharge measurements of West Fork of Carson River at Woodfords, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | | Discharge. |
|---|---|---|---|---|
| | | U. S. Reclamation Service gage at bridge. | Stone & Webster gage above cable. | |
| | | *Feet.* | *Feet.* | *Sec.-feet.* |
| 1910. | | | | |
| Mar. 30 | F. C. Schafer | 2.25 | | 132 |
| July 27 | Stone & Webster Engineering Corporation | | 1.20 | 47 |
| Aug. 10 | do | | .80 | 28 |
| 25 | do | | .70 | 24 |
| Oct. 11 | H. D. McGlashan | .42 | .78 | 33 |
| Dec. 10 | Stone & Webster Engineering Corporation | | 1.00 | 49 |
| 12 | D. S. Stuver | 1.08 | | 46 |
| 1911. | | | | |
| Mar. 28 | Stone & Webster Engineering Corporation | | 1.50 | 95 |
| Apr. 10 | J. E. Stewart | 2.40 | 1.85 | 149 |
| June 9 | Stone & Webster Engineering Corporation | | 4.00 | 802 |
| 22 | J. E. Stewart | 4.43 | 3.86 | 797 |
| July 20 | Stone & Webster Engineering Corporation | | 2.65 | 289 |
| 28 | do | | 2.15 | 175 |
| 28 | G. T. Peekema | 2.35 | 2.10 | 192 |
| Sept. — | Stone & Webster Engineering Corporation | | .81 | 43 |
| Oct. 10 | do | | .60 | 26 |
| Nov. 6 | J. E. Stewart | | .68 | 30 |
| 1912. | | | | |
| June 23 | H. J. Tompkins | 2.03 | 2.00 | 119 |

*Discharge measurements of canal diversions between the cable and bridge at Woodfords, Cal., in 1910–11.*

| Date. | Upper canal. | Middle canal. | Lower canal. | Total diversion. |
|---|---|---|---|---|
| 1910. | *Sec.-feet.* | *Sec.-feet.* | *Sec.-feet.* | *Sec.-feet.* |
| July 27 | 8.7 | 0.0 | 13.5 | 22.2 |
| Aug. 10 | 9.9 | .95 | 8.6 | 19.45 |
| 13 | 8.8 | .0 | 9.0 | 17.8 |
| 25 | 6.3 | 1.6 | 10.8 | 18.7 |
| Sept. 8 | 10.4 | .4 | 7.8 | 18.6 |
| 1911. | | | | |
| July 28 | 12.5 | 13.4 | 9.8 | 35.7 |

*Daily gage height, in feet, of West Fork of Carson River at Woodfords, Cal., for 1900–1912.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901. | | | | | | | | | | | | |
| 1 | ...... | 2.55 | 2.55 | 2.65 | 2.45 | 3.7 | 3.05 | 3.9 | 4.1 | 3.4 | 3.0 | 2.5 |
| 2 | ...... | 2.5 | 2.5 | 2.65 | 2.5 | 3.7 | 3.1 | 3.9 | 4.2 | 3.3 | 2.9 | 2.5 |
| 3 | ...... | 2.45 | 2.5 | 2.5 | 2.45 | 3.65 | 3.1 | 3.9 | 4.2 | 3.2 | 2.9 | 2.5 |
| 4 | ...... | 2.4 | 2.45 | 2.55 | 2.45 | 3.6 | 3.1 | 3.9 | 4.1 | 3.0 | 2.9 | 2.5 |
| 5 | ...... | 2.4 | 2.4 | 2.5 | 2.4 | 3.6 | 3.05 | 3.9 | 4.2 | 3.1 | 3.0 | 2.4 |
| 6 | ...... | 2.4 | 2.5 | 2.5 | 2.4 | 3.5 | 3.05 | 4.65 | 4.1 | 3.1 | 3.3 | 2.4 |
| 7 | ...... | 2.5 | 2.35 | 2.55 | 2.4 | 3.5 | 3.05 | 4.45 | 4.1 | 3.2 | 2.9 | 2.4 |
| 8 | ...... | 2.6 | 2.4 | 2.6 | 2.4 | 3.4 | 3.05 | 4.6 | 4.1 | 3.2 | 2.9 | 2.4 |
| 9 | ...... | 2.6 | 2.5 | 2.6 | 2.4 | 3.4 | 3.05 | 4.75 | 3.8 | 3.1 | 2.9 | 2.4 |
| 10 | ...... | 2.55 | 2.45 | 2.55 | 2.4 | 3.35 | 3.15 | 5.05 | 3.8 | 3.2 | 2.8 | 2.4 |
| 11 | ...... | 2.5 | 2.5 | 2.5 | 2.45 | 3.3 | 3.15 | 5.3 | 3.8 | 3.2 | 2.8 | 2.4 |
| 12 | ...... | 2.45 | 2.5 | 2.5 | 2.4 | 3.3 | 3.2 | 5.4 | 3.8 | 3.2 | 2.7 | 2.4 |
| 13 | ...... | 2.4 | 2.45 | 2.55 | 2.45 | 3.3 | 3.3 | 5.35 | 3.7 | 3.2 | 2.7 | 2.4 |
| 14 | ...... | 2.4 | 2.5 | 2.55 | 2.55 | 3.25 | 3.4 | 5.15 | 3.7 | 3.1 | 2.6 | 2.4 |
| 15 | ...... | 2.45 | 2.48 | 2.6 | 2.6 | 3.25 | 3.45 | 4.85 | 3.7 | 3.2 | 2.7 | 2.4 |
| 16 | ...... | 2.5 | 2.35 | 2.6 | 2.7 | 3.3 | 3.5 | 4.7 | 3.7 | 3.2 | 2.7 | 2.4 |
| 17 | ...... | 2.4 | 2.4 | 2.55 | 3.1 | 3.25 | 3.65 | 4.6 | 3.7 | 3.3 | 2.7 | 2.4 |
| 18 | 2.4 | 2.45 | 2.35 | 2.5 | 3.2 | 3.2 | 3.7 | 4.45 | 3.7 | 3.2 | 2.9 | 2.4 |
| 19 | 2.5 | 2.5 | 2.4 | 2.5 | 3.3 | 3.2 | 3.7 | 4.7 | 3.8 | 3.2 | 2.8 | 2.4 |
| 20 | 2.7 | 2.5 | 2.5 | 2.45 | 3.3 | 3.2 | 3.75 | 4.55 | 3.9 | 3.0 | 2.7 | 2.4 |
| 21 | 2.7 | 2.55 | 2.7 | 2.4 | 3.4 | 3.2 | 3.8 | 4.35 | 3.8 | 3.0 | 2.6 | 2.4 |
| 22 | 2.6 | 2.4 | 2.6 | 2.4 | 3.4 | 3.2 | 4.05 | 4.1 | 3.8 | 3.1 | 2.5 | 2.4 |
| 23 | 2.4 | 2.35 | 2.65 | 2.4 | 3.4 | 3.15 | 4.05 | 4.1 | 3.8 | 3.3 | 2.5 | 2.4 |
| 24 | 2.4 | 2.45 | 2.7 | 2.45 | 3.6 | 3.15 | 4.05 | 4.0 | 3.9 | 3.2 | 2.5 | 2.4 |
| 25 | 2.3 | 2.6 | 2.67 | 2.45 | 3.6 | 3.15 | 4.25 | 4.0 | 3.6 | 3.1 | 2.5 | 2.4 |
| 26 | 2.3 | 2.5 | 2.65 | 2.4 | 3.6 | 3.15 | 4.25 | 3.95 | 3.5 | 3.0 | 2.5 | 2.4 |
| 27 | 2.2 | 2.5 | 2.7 | 2.4 | 3.65 | 3.15 | 4.25 | 3.9 | 3.4 | 3.0 | 2.5 | 2.4 |
| 28 | 2.2 | 2.45 | 2.65 | 2.45 | 3.7 | 3.15 | 4.25 | 3.9 | 3.4 | 3.0 | 2.5 | 2.4 |
| 29 | 2.35 | 2.5 | 2.6 | 2.45 | ...... | 3.1 | 4.1 | 3.85 | 3.7 | 3.0 | 2.8 | 2.5 |
| 30 | 2.4 | 2.55 | 2.6 | 2.4 | ...... | 3.1 | 4.05 | 3.95 | 3.5 | 2.9 | 2.5 | 2.5 |
| 31 | 2.5 | ...... | 2.6 | 2.45 | ...... | 3.05 | ...... | 4.05 | ...... | 2.9 | 2.5 | ...... |
| 1901–2. | | | | | | | | | | | | |
| 1 | 2.5 | 2.6 | 2.7 | 3.0 | 3.7 | 4.4 | 3.1 | 3.9 | 4.6 | 4.2 | 2.5 | 2.3 |
| 2 | 2.5 | 2.6 | 2.7 | 2.9 | 3.9 | 4.6 | 3.2 | 3.9 | 4.5 | 3.9 | 2.4 | 2.3 |
| 3 | 2.5 | 2.5 | 2.7 | 2.9 | 3.8 | 4.2 | 3.4 | 3.8 | 4.5 | 3.8 | 2.4 | 2.2 |
| 4 | 2.5 | 2.5 | 2.7 | 2.9 | 3.9 | 3.9 | 3.4 | 3.7 | 4.4 | 3.8 | 2.4 | 2.2 |
| 5 | 2.5 | 2.5 | 2.6 | 2.9 | 4.0 | 3.6 | 3.5 | 3.7 | 4.4 | 3.8 | 2.4 | 2.2 |
| 6 | 2.5 | 2.5 | 2.6 | 2.8 | 4.0 | 3.6 | 3.8 | 3.7 | 4.4 | 3.6 | 2.4 | 2.2 |
| 7 | 2.5 | 2.5 | 2.7 | 2.9 | 4.0 | 3.5 | 3.9 | 3.6 | 4.4 | 3.6 | 2.4 | 2.2 |
| 8 | 2.5 | 2.5 | 2.7 | 3.0 | 3.5 | 3.5 | 3.9 | 3.6 | 4.6 | 3.5 | 2.4 | 2.2 |
| 9 | 2.5 | 2.5 | 2.7 | 3.0 | 3.9 | 3.6 | 3.8 | 3.7 | 4.5 | 3.4 | 2.6 | 2.2 |
| 10 | 2.5 | 2.6 | 2.7 | 3.0 | 3.9 | 3.6 | 3.8 | 3.8 | 4.5 | 3.4 | 2.4 | 2.2 |
| 11 | 2.4 | 2.5 | 2.7 | 2.9 | 3.8 | 3.6 | 3.9 | 4.0 | 4.4 | 3.4 | 2.3 | 2.2 |
| 12 | 2.5 | 2.5 | 2.7 | 2.9 | 3.8 | 3.4 | 3.9 | 4.0 | 4.4 | 3.2 | 2.3 | 2.2 |
| 13 | 2.5 | 2.6 | 2.8 | 2.8 | 3.9 | 3.5 | 3.9 | 4.0 | 4.4 | 3.2 | 2.3 | 2.3 |
| 14 | 2.5 | 2.6 | 2.8 | 2.9 | 3.8 | 3.6 | 3.9 | 4.1 | 4.4 | 3.0 | 2.4 | 2.3 |
| 15 | 2.5 | 2.6 | 2.8 | 2.9 | 3.8 | 3.4 | 3.8 | 4.2 | 4.0 | 3.0 | 2.4 | 2.3 |
| 16 | 2.5 | 2.5 | 2.8 | 2.9 | 3.9 | 3.3 | 3.8 | 4.4 | 4.2 | 2.9 | 2.3 | 2.3 |
| 17 | 2.5 | 2.5 | 2.8 | 3.0 | 4.0 | 3.2 | 3.6 | 3.8 | 4.1 | 2.9 | 2.3 | 2.3 |
| 18 | 2.4 | 2.5 | 2.8 | 2.9 | 3.9 | 3.0 | 3.5 | 3.8 | 4.1 | 2.9 | 2.3 | 2.3 |
| 19 | 2.4 | 2.6 | 2.8 | 2.9 | 3.8 | 2.8 | 3.4 | 3.8 | 4.1 | 2.8 | 2.3 | 2.3 |
| 20 | 2.4 | 2.6 | 2.8 | 3.0 | 3.9 | 2.7 | 3.3 | 3.9 | 4.1 | 2.9 | 2.3 | 2.3 |
| 21 | 2.4 | 2.6 | 2.8 | 3.2 | 3.8 | 2.7 | 3.3 | 4.2 | 4.1 | 2.9 | 2.3 | 2.2 |
| 22 | 2.4 | 2.6 | 2.8 | 3.1 | 3.9 | 2.8 | 3.3 | 4.3 | 4.2 | 2.8 | 2.3 | 2.2 |
| 23 | 2.5 | 2.6 | 2.8 | 3.2 | 3.9 | 2.8 | 3.4 | 4.4 | 4.2 | 2.9 | 2.3 | 2.2 |
| 24 | 2.5 | 2.6 | 2.9 | 3.2 | 4.0 | 2.6 | 3.4 | 4.6 | 4.3 | 2.9 | 2.4 | 2.2 |
| 25 | 2.5 | 2.6 | 2.9 | 3.3 | 4.2 | 2.6 | 3.3 | 4.6 | 4.2 | 2.8 | 2.5 | 2.2 |
| 26 | 2.5 | 2.6 | 3.0 | 3.2 | 4.2 | 2.6 | 3.4 | 4.8 | 4.1 | 2.7 | 2.4 | 2.2 |
| 27 | 2.6 | 2.6 | 2.9 | 3.4 | 4.3 | 2.6 | 3.3 | 4.8 | 4.1 | 2.7 | 2.3 | 2.2 |
| 28 | 2.6 | 2.6 | 2.9 | 3.5 | 4.3 | 2.6 | 3.5 | 4.5 | 4.2 | 2.6 | 2.3 | 2.2 |
| 29 | 2.6 | 2.6 | 2.9 | 3.6 | ...... | 2.6 | 3.5 | 4.7 | 4.3 | 2.6 | 2.3 | 2.2 |
| 30 | 2.6 | 2.6 | 2.9 | 3.6 | ...... | 2.6 | 3.6 | 4.7 | 4.3 | 2.6 | 2.3 | 2.2 |
| 31 | 2.6 | ...... | 3.0 | 3.7 | ...... | 2.5 | ...... | 4.7 | ...... | 2.6 | 2.3 | ...... |

*Daily gage height, in feet, of West Fork of Carson River at Woodfords, Cal., for 1900–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1902–3.** | | | | | | | | | | | | |
| 1 | 2.2 | 2.4 | 2.5 | 2.4 | 2.9 | 2.7 | 3.4 | 4.9 | 4.9 | 3.7 | 2.7 | 2.2 |
| 2 | 2.2 | 2.4 | 2.5 | 2.4 | 2.8 | 2.7 | 3.5 | 4.9 | 4.9 | 3.6 | 2.7 | 2.2 |
| 3 | 2.2 | 2.4 | 2.5 | 2.4 | 2.8 | 2.7 | 3.4 | 5.0 | 5.0 | 3.5 | 2.6 | 2.2 |
| 4 | 2.2 | 2.4 | 2.5 | 2.4 | 2.8 | 2.7 | 3.3 | 5.0 | 5.2 | 3.5 | ...... | 2.2 |
| 5 | 2.2 | 2.3 | 2.5 | 2.4 | 2.7 | 2.8 | 3.2 | 5.1 | 5.3 | 3.5 | 2.5 | 2.2 |
| 6 | 2.2 | 2.3 | 2.5 | 2.3 | 2.5 | 2.9 | 3.0 | 5.2 | 5.3 | 3.5 | 2.5 | 2.2 |
| 7 | 2.2 | 2.4 | 2.5 | 2.3 | 2.5 | 2.9 | 2.9 | 5.3 | 5.3 | 3.5 | 2.5 | 2.2 |
| 8 | 2.2 | 2.3 | 2.5 | 2.3 | 2.6 | 2.9 | 2.9 | 5.5 | 5.3 | ...... | ...... | 2.2 |
| 9 | 2.2 | 2.4 | 2.5 | 2.3 | 2.7 | 2.8 | 3.1 | 5.5 | 5.2 | ...... | 2.5 | 2.2 |
| 10 | 2.2 | 2.4 | 2.5 | 2.4 | 2.7 | 2.7 | 3.2 | 5.6 | 5.1 | 3.3 | 2.4 | 2.2 |
| 11 | 2.2 | 2.5 | 2.5 | 2.4 | 2.7 | 2.6 | 3.2 | 5.6 | 5.1 | 3.2 | 2.4 | 2.2 |
| 12 | 2.2 | 2.5 | 2.7 | 2.4 | 2.8 | 2.6 | 3.3 | 5.6 | 5.1 | 3.2 | 2.4 | 2.2 |
| 13 | 2.3 | 2.5 | 2.6 | 2.3 | 2.6 | 2.5 | 3.4 | 5.6 | 5.0 | 3.2 | 2.4 | 2.1 |
| 14 | 2.2 | 2.6 | 2.5 | 2.3 | 2.5 | 2.5 | 3.5 | 5.5 | 5.0 | 3.1 | ...... | 2.15 |
| 15 | 2.3 | 2.5 | 2.5 | 2.3 | 2.5 | 2.4 | 3.4 | 5.3 | 4.9 | 3.0 | 2.4 | 2.15 |
| 16 | 2.3 | 2.4 | 2.6 | 2.3 | 2.5 | 2.4 | 3.4 | 5.0 | 4.8 | 3.0 | 2.4 | 2.15 |
| 17 | 2.2 | 2.4 | 2.6 | 2.3 | 2.5 | 2.5 | 3.3 | 5.0 | 4.8 | 3.0 | 2.3 | 2.2 |
| 18 | 2.2 | 2.4 | 2.6 | 2.3 | 2.6 | 2.6 | 3.3 | 4.8 | 4.8 | 2.9 | ...... | 2.2 |
| 19 | 2.3 | 2.4 | 2.6 | 2.3 | 2.6 | 2.6 | 3.3 | 4.7 | 4.8 | ...... | 2.3 | 2.2 |
| 20 | 2.3 | 2.4 | 2.6 | 2.3 | 2.7 | 2.6 | 3.5 | 4.5 | 4.7 | 2.9 | 2.4 | 2.2 |
| 21 | 2.3 | 2.5 | 2.7 | 2.3 | 2.7 | 2.6 | 3.6 | 4.4 | 4.6 | ...... | 2.3 | 2.2 |
| 22 | 2.3 | 2.5 | 2.7 | 2.3 | 2.7 | 2.6 | 3.8 | 4.4 | 4.5 | 2.9 | 2.3 | 2.2 |
| 23 | 2.3 | 2.5 | 2.8 | 2.4 | 2.8 | 2.6 | 4.1 | 4.4 | 4.4 | ...... | 2.3 | 2.2 |
| 24 | 2.3 | 2.5 | 2.8 | 2.6 | 2.7 | 2.6 | 4.3 | 4.4 | 4.4 | ...... | 2.3 | 2.25 |
| 25 | 2.4 | 2.5 | 2.8 | 2.5 | 2.7 | 2.6 | 4.5 | 4.5 | 4.3 | 2.9 | 2.3 | 2.25 |
| 26 | 2.3 | 2.6 | 2.8 | 2.7 | 2.7 | 2.6 | 4.6 | 4.6 | 4.2 | 2.8 | 2.3 | 2.25 |
| 27 | 2.2 | 2.6 | 2.8 | 3.0 | 2.7 | 2.6 | 4.5 | 4.7 | 4.2 | ...... | 2.3 | 2.25 |
| 28 | 2.3 | 2.5 | 2.8 | 3.0 | 2.7 | 2.7 | 4.6 | 4.7 | 4.1 | 2.8 | 2.3 | 2.25 |
| 29 | 2.4 | 2.5 | 2.6 | 3.0 | ...... | 2.8 | 4.6 | 4.8 | 4.0 | 2.8 | 2.2 | 2.25 |
| 30 | 2.4 | 2.5 | 2.6 | 2.9 | ...... | 3.0 | 4.7 | 4.8 | 3.9 | 2.7 | 2.2 | 2.25 |
| 31 | 2.4 | ...... | 2.5 | 3.0 | ...... | 3.2 | ...... | 4.8 | ...... | ...... | 2.2 | ...... |
| **1903–4.** | | | | | | | | | | | | |
| 1 | 2.2 | 2.25 | 2.7 | 2.43 | ...... | 3.82 | 3.60 | 3.71 | 4.84 | 3.82 | 3.09 | 2.55 |
| 2 | 2.2 | 2.25 | 2.65 | 2.43 | ...... | 3.66 | 3.50 | 3.66 | 4.95 | 3.80 | 3.14 | 2.55 |
| 3 | 2.25 | 2.25 | 2.6 | 2.43 | ...... | 3.60 | 3.55 | 4.12 | 4.95 | 3.77 | 3.09 | 2.55 |
| 4 | 2.25 | 2.3 | 2.6 | 2.38 | ...... | 3.60 | 3.50 | 4.43 | 5.20 | 3.77 | 3.09 | 2.60 |
| 5 | 2.25 | 2.25 | 2.6 | 2.38 | ...... | 3.66 | 3.45 | 4.90 | 5.20 | 3.82 | 2.99 | 2.55 |
| 6 | 2.25 | 2.3 | 2.7 | 2.38 | ...... | 3.71 | 3.55 | 5.52 | 5.09 | 3.77 | 3.04 | 2.50 |
| 7 | 2.3 | 2.25 | 2.75 | 2.48 | 2.48 | 3.71 | 3.66 | 5.78 | 5.04 | 3.72 | 2.88 | 2.55 |
| 8 | 2.3 | 2.2 | 2.75 | 2.48 | 2.53 | 3.71 | 3.87 | 5.78 | 4.88 | 3.67 | 2.88 | 2.44 |
| 9 | 2.25 | 2.2 | 2.8 | 2.58 | 2.53 | 3.66 | 4.12 | 5.98 | 4.78 | 3.67 | 2.88 | 2.39 |
| 10 | 2.3 | 2.2 | 2.8 | 2.58 | 2.48 | 3.60 | 4.38 | 6.14 | 4.68 | 3.67 | 2.78 | 2.39 |
| 11 | 2.2 | 2.35 | 2.8 | 2.58 | 2.48 | 3.50 | 4.68 | 6.40 | 4.68 | 3.62 | 2.78 | 2.39 |
| 12 | 2.2 | 2.5 | 2.8 | 2.58 | 2.53 | 3.45 | 4.95 | 6.45 | 4.73 | 3.57 | 2.83 | 2.44 |
| 13 | 2.2 | 2.9 | 2.75 | 2.58 | 2.58 | 3.40 | 5.68 | 6.19 | 4.78 | 3.62 | 2.78 | 2.34 |
| 14 | 2.2 | 3.06 | 2.75 | 2.58 | 2.63 | 3.45 | 5.37 | 6.19 | 4.88 | 3.65 | 2.73 | 2.78 |
| 15 | 2.2 | 3.06 | 2.75 | 2.63 | 2.68 | 3.45 | 5.10 | 6.14 | 4.83 | 3.67 | 2.68 | 2.99 |
| 16 | 2.2 | 3.0 | 2.75 | 2.58 | 2.78 | 3.35 | 4.95 | 5.98 | 4.73 | 3.62 | 2.68 | 3.09 |
| 17 | 2.2 | 3.0 | 2.75 | 2.53 | 2.83 | 3.30 | 4.95 | 5.98 | 4.68 | 3.57 | 2.63 | 2.88 |
| 18 | 2.2 | 3.0 | 2.75 | 2.53 | 2.83 | 3.30 | 4.90 | 5.52 | 4.68 | 3.57 | 2.68 | 3.76 |
| 19 | 2.2 | 2.95 | 2.75 | 2.53 | 2.88 | 3.87 | 4.84 | 5.57 | 4.68 | 3.52 | 2.63 | 2.68 |
| 20 | 2.2 | 2.95 | 2.8 | 2.53 | 2.99 | 3.76 | 4.79 | 5.73 | 4.58 | 3.47 | 2.58 | 2.63 |
| 21 | 2.2 | 2.9 | 2.85 | 2.53 | 3.14 | 3.71 | 4.79 | 5.73 | 4.47 | 3.57 | 2.48 | 2.63 |
| 22 | 2.2 | 2.9 | 2.85 | 2.53 | 3.66 | 3.60 | 4.22 | 5.47 | 4.37 | 3.57 | 2.48 | 2.58 |
| 23 | 2.2 | 2.9 | 2.75 | 2.53 | 3.92 | 3.60 | 4.22 | 5.57 | 4.22 | 3.24 | 2.53 | 2.53 |
| 24 | 2.2 | 2.8 | 2.75 | 2.48 | 4.43 | 3.55 | 4.27 | 5.47 | 4.17 | 3.24 | 2.63 | 2.68 |
| 25 | 2.2 | 2.8 | 2.7 | 2.48 | 4.48 | 3.50 | 4.38 | 5.47 | 4.07 | 3.24 | 2.58 | 2.68 |
| 26 | 2.2 | 2.8 | 2.65 | 2.43 | 4.32 | 3.55 | 4.07 | 5.21 | 4.02 | 3.09 | 2.48 | 2.68 |
| 27 | 2.15 | 2.8 | 2.65 | 2.43 | 4.27 | 3.66 | 2.88 | 4.84 | 4.02 | 3.19 | 2.75 | 2.68 |
| 28 | 2.2 | 2.75 | 2.65 | 2.43 | 4.02 | 3.87 | 3.71 | 4.84 | 4.02 | 3.14 | 2.70 | 2.63 |
| 29 | 2.2 | 2.7 | 2.5 | 2.38 | 3.97 | 3.76 | 3.82 | 4.84 | 3.97 | 3.14 | 2.70 | 2.68 |
| 30 | 2.25 | 2.7 | 2.45 | 2.38 | ...... | 3.71 | 3.76 | 4.79 | 4.07 | 3.09 | 2.65 | 2.73 |
| 31 | 2.25 | ...... | 2.45 | ...... | ...... | 3.66 | ...... | 4.84 | ...... | 3.09 | 2.60 | ...... |

*Daily gage height, in feet, of West Fork of Carson River at Woodfords, Cal., for 1900–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904-5. | | | | | | | | | | | | |
| 1 | 2.88 | 2.68 | 2.58 | ....... | 2.97 | 3.05 | 2.93 | 4.16 | 3.85 | 3.1 | 2.3 | 2.0 |
| 2 | 2.73 | 2.68 | 2.58 | ....... | 3.01 | 3.18 | 2.93 | 4.2 | 3.8 | 3.05 | 2.35 | 2.0 |
| 3 | 2.73 | 2.68 | 2.58 | ....... | 3.01 | 3.05 | 2.97 | 3.9 | 3.75 | 3.05 | 2.2 | 2.0 |
| 4 | 2.68 | 2.68 | 2.58 | ....... | 2.97 | 3.05 | 2.89 | 3.85 | 3.55 | 2.97 | 2.3 | 2.0 |
| 5 | 2.78 | 2.63 | 2.53 | ....... | 2.93 | 3.05 | 2.89 | 3.7 | 3.5 | 2.8 | 2.25 | 2.05 |
| 6 | 2.88 | 2.58 | 2.58 | ....... | 3.01 | 2.97 | 2.97 | 3.7 | 3.55 | 2.89 | 2.25 | 2.0 |
| 7 | 2.88 | 2.58 | 2.53 | ....... | 3.05 | 3.01 | 3.05 | 3.65 | 3.7 | 2.89 | 2.25 | 2.0 |
| 8 | 2.83 | 2.58 | 2.53 | 2.77 | 3.05 | 3.05 | 3.14 | 3.6 | 3.65 | 2.75 | 2.15 | 2.0 |
| 9 | 2.88 | 2.58 | 2.58 | 2.81 | 3.05 | 3.23 | 3.23 | 3.6 | 3.6 | 2.89 | 2.15 | 2.0 |
| 10 | 3.04 | 2.63 | 2.58 | 2.81 | 3.14 | 3.23 | 3.41 | 3.65 | 3.7 | 3.14 | 2.25 | 2.0 |
| 11 | 3.09 | 2.63 | 2.58 | 2.85 | 3.05 | 3.14 | 3.41 | 3.6 | 3.75 | 3.05 | 2.2 | 2.0 |
| 12 | 2.99 | 2.68 | 2.58 | 2.89 | 3.05 | 3.05 | 3.36 | 3.65 | 3.8 | 3.05 | 2.2 | 2.0 |
| 13 | 2.88 | 2.68 | 2.48 | 2.85 | 2.97 | 3.05 | 3.36 | 3.8 | 3.75 | 2.85 | 2.15 | 2.0 |
| 14 | 2.83 | 2.68 | 2.53 | 2.85 | 3.01 | 3.14 | 3.36 | 3.9 | 3.75 | 2.75 | 2.1 | 2.0 |
| 15 | 2.88 | 2.68 | 2.53 | 2.89 | 2.89 | 3.23 | 3.81 | 4.12 | 3.75 | 2.65 | 2.1 | 2.0 |
| 16 | 2.88 | 2.63 | 2.38 | 2.81 | 2.89 | 3.18 | 3.85 | 4.08 | 3.6 | 2.65 | 2.1 | 2.0 |
| 17 | 2.78 | 2.58 | 2.53 | 2.81 | 2.85 | 3.5 | 3.75 | 4.24 | 3.65 | 2.55 | 2.0 | 2.0 |
| 18 | 2.88 | 2.68 | 2.58 | 2.85 | 2.83 | 3.41 | 3.7 | 4.4 | 3.65 | 2.6 | 2.1 | 2.05 |
| 19 | 2.88 | 2.63 | 2.63 | 2.85 | 2.81 | 3.28 | 3.6 | 4.36 | 3.6 | 2.55 | 2.1 | 2.06 |
| 20 | 2.88 | 2.63 | 2.58 | 2.85 | 2.81 | 3.23 | 3.5 | 4.36 | 3.5 | 2.5 | 2.1 | 2.1 |
| 21 | 2.88 | 2.58 | 2.58 | 2.81 | 2.85 | 3.14 | 3.85 | 4.36 | 3.5 | 2.5 | 2.1 | 2.1 |
| 22 | 2.83 | 2.63 | 2.58 | 2.89 | 2.89 | 3.14 | 3.85 | 4.36 | 3.41 | 2.45 | 2.15 | 2.1 |
| 23 | 2.78 | 2.68 | 2.68 | 2.93 | 2.89 | 3.23 | 3.95 | 4.12 | 3.36 | 2.45 | 2.1 | 2.1 |
| 24 | 2.78 | 2.63 | 2.63 | 3.05 | 2.85 | 3.14 | 4.12 | 4.16 | 3.32 | 2.5 | 2.1 | 2.1 |
| 25 | 2.73 | 2.78 | 2.68 | 2.97 | 2.89 | 3.14 | 4.16 | 4.16 | 3.32 | 2.45 | 2.1 | 2.1 |
| 26 | 2.68 | 2.78 | 2.68 | 2.93 | 2.97 | 3.23 | 4.16 | 4.16 | 3.28 | 2.4 | 2.05 | 2.2 |
| 27 | 2.68 | 2.68 | 2.73 | 2.85 | 2.97 | 3.28 | 4.24 | 4.0 | 3.23 | 2.45 | 2.0 | 2.2 |
| 28 | 2.68 | 2.68 | 2.83 | 2.81 | 3.05 | 3.14 | 4.32 | 3.9 | 3.23 | 2.4 | 2.0 | 2.2 |
| 29 | 2.63 | 2.63 | 3.09 | 2.81 | ....... | 3.06 | 4.32 | 3.8 | 3.14 | 2.5 | 2.0 | 2.2 |
| 30 | 2.63 | 2.63 | 3.24 | 2.85 | ....... | 2.89 | 4.28 | 3.85 | 3.18 | 2.35 | 2.0 | 2.2 |
| 31 | 2.63 | ....... | 2.99 | 2.89 | ....... | 2.89 | ....... | 3.9 | ....... | 2.3 | 2.0 | ....... |
| 1905-6. | | | | | | | | | | | | |
| 1 | 2.2 | 2.2 | 2.3 | 2.4 | 2.85 | 2.5 | 2.85 | 5.7 | 4.4 | 4.6 | 3.4 | ....... |
| 2 | 2.15 | 2.2 | 2.3 | 2.5 | 2.8 | 2.55 | 2.8 | 5.85 | 4.6 | 4.7 | 3.3 | 2.9 |
| 3 | 2.1 | 2.2 | 2.3 | 2.55 | 2.75 | 2.55 | 2.8 | 6.0 | 4.8 | 4.8 | 3.3 | 2.9 |
| 4 | 2.1 | 2.2 | 2.3 | 2.55 | 2.6 | 2.5 | 2.75 | 6.1 | 5.0 | 4.7 | 3.3 | 2.85 |
| 5 | 2.1 | 2.2 | 2.4 | 2.4 | 2.6 | 2.55 | 2.6 | 6.4 | 5.0 | 4.7 | 3.25 | 2.8 |
| 6 | 2.15 | 2.2 | 2.4 | 2.4 | 2.6 | 2.6 | 2.55 | 6.45 | 4.7 | 4.7 | 3.3 | 2.7 |
| 7 | 2.15 | 2.2 | 2.5 | 2.4 | 2.6 | 2.65 | 2.5 | 6.5 | 4.9 | 4.7 | 3.3 | 2.6 |
| 8 | 2.2 | 2.2 | 2.4 | 2.3 | 2.55 | 2.7 | 2.6 | 6.7 | 4.8 | 4.6 | 3.25 | 2.55 |
| 9 | 2.2 | 2.2 | 2.5 | 2.35 | 2.5 | 2.75 | 2.6 | 6.8 | 4.8 | 4.5 | 3.9 | 2.5 |
| 10 | 2.2 | 2.2 | 2.5 | 2.5 | 2.4 | 2.6 | 2.7 | 6.8 | 5.2 | 4.4 | 3.5 | 2.5 |
| 11 | 2.2 | 2.2 | 2.5 | 2.6 | 2.5 | 2.55 | 2.7 | 6.4 | 5.5 | 4.3 | 3.4 | 2.4 |
| 12 | 2.2 | 2.2 | 2.5 | 2.75 | 2.55 | 2.5 | 2.75 | 6.35 | 5.8 | 4.2 | 3.4 | 2.4 |
| 13 | 2.2 | 2.2 | 2.6 | 2.85 | 2.6 | 2.45 | 2.8 | ....... | 5.7 | 4.2 | 3.4 | 2.3 |
| 14 | 2.2 | 2.2 | 2.55 | 2.9 | 2.7 | 2.4 | 2.9 | ....... | 5.8 | 4.1 | 3.35 | 2.4 |
| 15 | 2.15 | 2.2 | 2.6 | 2.9 | 2.75 | 2.4 | 2.95 | ....... | 5.8 | 4.0 | ....... | 2.2 |
| 16 | 2.15 | 2.2 | 2.55 | 3.0 | 2.75 | 2.45 | 3.0 | ....... | 5.7 | 4.0 | ....... | 2.2 |
| 17 | 2.1 | 2.2 | 2.6 | 3.1 | 2.8 | 2.5 | 3.25 | 5.1 | 5.6 | 3.8 | ....... | 2.2 |
| 18 | 2.15 | 2.2 | 2.6 | 3.2 | 2.8 | 2.5 | 3.3 | ....... | 5.5 | 3.7 | 3.4 | 2.2 |
| 19 | 2.15 | 2.2 | 2.6 | 3.1 | 2.85 | 2.55 | 3.5 | 5.0 | 5.3 | 3.65 | 3.4 | 2.3 |
| 20 | 2.15 | 2.2 | 2.55 | 3.0 | 2.8 | 2.6 | 3.7 | 4.9 | 5.0 | 3.5 | 3.3 | 2.2 |
| 21 | 2.2 | 2.2 | 2.55 | 3.0 | 2.8 | 2.65 | 3.85 | 4.9 | 5.0 | 3.4 | 3.35 | 2.2 |
| 22 | 2.2 | 2.2 | 2.55 | 2.9 | 2.75 | 2.7 | 4.1 | 4.95 | 5.0 | 3.3 | 3.4 | 2.3 |
| 23 | 2.2 | 2.2 | 2.65 | 2.65 | 2.7 | 2.8 | 4.2 | 5.0 | 4.9 | 3.35 | 3.35 | 2.4 |
| 24 | 2.2 | 2.2 | 2.65 | 2.4 | 2.6 | 2.8 | 4.3 | 5.1 | 4.9 | 3.2 | 3.35 | 2.5 |
| 25 | 2.2 | 2.2 | 2.55 | 2.5 | 2.55 | 2.8 | 4.4 | 4.96 | 4.8 | 3.2 | 3.3 | 2.5 |
| 26 | 2.2 | 2.2 | 2.55 | 2.6 | 2.5 | 2.9 | 4.6 | 4.9 | 4.7 | 4.3 | 3.3 | 2.4 |
| 27 | 2.2 | 2.2 | 2.55 | 2.75 | 2.5 | 2.95 | 4.85 | ....... | 4.8 | 3.6 | 3.3 | 2.35 |
| 28 | 2.2 | 2.4 | 2.5 | 2.8 | 2.5 | 2.95 | 5.1 | ....... | 4.8 | 3.55 | 3.25 | 2.35 |
| 29 | 2.2 | 2.45 | 2.5 | 2.8 | ....... | 3.0 | 5.3 | ....... | 4.7 | 3.4 | 3.2 | 2.30 |
| 30 | 2.2 | 2.3 | 2.5 | 2.85 | ....... | 3.0 | 5.5 | ....... | 4.8 | 3.3 | 3.2 | 2.35 |
| 31 | 2.2 | ....... | 2.5 | 2.85 | ....... | 2.9 | ....... | ....... | ....... | 3.3 | ....... | ....... |

*Daily gage height, in feet, of West Fork of Carson River at Woodfords, Cal., for 1900–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1906–7.** | | | | | | | | | | | | |
| 1 | 2.4 | 2.7 | 2.0 | ...... | 2.85 | 3.2 | 3.45 | 4.9 | ...... | ...... | 3.1 | 2.2 |
| 2 | 2.4 | 2.7 | 2.1 | ...... | 3.3 | 3.15 | 3.5 | 4.8 | ...... | ...... | 3.2 | 2.2 |
| 3 | 2.4 | 2.95 | 2.1 | ...... | 3.3 | 3.1 | 3.55 | 4.8 | ...... | ...... | 3.2 | 2.1 |
| 4 | 2.4 | 3.1 | 2.15 | ...... | 3.35 | 3.2 | 3.55 | 4.9 | ...... | ...... | 3.2 | 2.1 |
| 5 | 2.4 | 3.[illegible] | 2.1 | ...... | 3.4 | 3.2 | 3.6 | 4.9 | ...... | ...... | 3.0 | 2.1 |
| 6 | 2.55 | 3.0 | 2.1 | ...... | 3.5 | 3.2 | 3.7 | 5.0 | ...... | ...... | 3.0 | 2.0 |
| 7 | 2.6 | 2.9 | 2.0 | ...... | 3.45 | 3.2 | 3.75 | 5.0 | ...... | ...... | 3.0 | 2.0 |
| 8 | 2.55 | 2.9 | 2.5 | ...... | 3.3 | 3.2 | 3.75 | 4.9 | 4.1 | ...... | 3.0 | 2.0 |
| 9 | 2.5 | 2.85 | 2.6 | 2.9 | 3.2 | 3.2 | 3.85 | 4.95 | 4.2 | 3.9 | 2.9 | 2.0 |
| 10 | 2.5 | 2.8 | 2.7 | 2.8 | 3.2 | ...... | 3.95 | 5.0 | 4.4 | 3.7 | 2.9 | 2.0 |
| 11 | 2.45 | 2.9 | 2.7 | 2.8 | 3.3 | ...... | 4.3 | 5.0 | 4.0 | 3.9 | 2.8 | 2.0 |
| 12 | 2.4 | 2.9 | 2.6 | 2.85 | 3.35 | 3.15 | 4.6 | 5.0 | 3.9 | 3.8 | 2.8 | ...... |
| 13 | 2.4 | 3.1 | 2.7 | 2.8 | 3.35 | 3.1 | 4.8 | 5.0 | 4.1 | 3.6 | 2.8 | ...... |
| 14 | 2.45 | 3.2 | 2.65 | 2.8 | 3.3 | 3.1 | 5.0 | 5.2 | 4.0 | 3.5 | 2.8 | ...... |
| 15 | 2.4 | 3.0 | 2.6 | 2.8 | 3.3 | 3.0 | 4.85 | 5.6 | 3.9 | 3.4 | 2.7 | ...... |
| 16 | 2.4 | 3.0 | 2.6 | 2.75 | 3.3 | 3.05 | 5.0 | 5.8 | 3.8 | 3.4 | 2.75 | ...... |
| 17 | 2.45 | 2.9 | 2.55 | 2.7 | 3.3 | 4.0 | 4.9 | 6.6 | 3.9 | 3.4 | 2.6 | ...... |
| 18 | 2.4 | 2.8 | 2.5 | 2.7 | 3.2 | 4.75 | 4.8 | (a) | 4.0 | 3.5 | 2.6 | ...... |
| 19 | 2.5 | 2.6 | 2.55 | 2.7 | 3.15 | 4.7 | 5.2 | ...... | 4.2 | 3.6 | 2.5 | ...... |
| 20 | 2.5 | 2.6 | 2.6 | 2.75 | 3.1 | 4.4 | 5.1 | ...... | 4.1 | 3.6 | 2.4 | ...... |
| 21 | 2.6 | 2.55 | 2.65 | 2.75 | 3.2 | 4.2 | 4.9 | ...... | 4.0 | 3.8 | 2.4 | ...... |
| 22 | 2.6 | 2.55 | 2.7 | 2.75 | 3.25 | 4.1 | 5.0 | ...... | 3.9 | 3.9 | 2.4 | ...... |
| 23 | 2.6 | 2.55 | 2.7 | 2.7 | 3.2 | ...... | 5.1 | ...... | 4.0 | 3.7 | 2.3 | ...... |
| 24 | 2.65 | 2.5 | 2.7 | 2.7 | 3.2 | ...... | 5.35 | ...... | 4.2 | 3.6 | 2.3 | ...... |
| 25 | 2.65 | 2.45 | 2.75 | 2.7 | 3.25 | 3.8 | 5.6 | ...... | 4.3 | 3.6 | 2.2 | ...... |
| 26 | 2.6 | 2.4 | 2.8 | 2.75 | 3.2 | 3.8 | 5.2 | ...... | 4.4 | 3.4 | 2.1 | ...... |
| 27 | 2.65 | 2.4 | 2.8 | 2.85 | 3.2 | 3.7 | 5.0 | ...... | 4.5 | 3.3 | 2.1 | ...... |
| 28 | 2.6 | 2.3 | 2.85 | 2.85 | 3.2 | 3.65 | 4.9 | ...... | 5.0 | 3.5 | 2.1 | ...... |
| 29 | 2.55 | 2.2 | 2.9 | 2.8 | ...... | 3.5 | 5.0 | ...... | 5.2 | 3.4 | 2.1 | ...... |
| 30 | 2.6 | 2.15 | 2.85 | 2.75 | ...... | 3.5 | 4.9 | ...... | 5.1 | 3.2 | 2.0 | ...... |
| 31 | 2.65 | ...... | 2.85 | 2.75 | ...... | 3.45 | ...... | ...... | ...... | 3.0 | 2.0 | ...... |
| **1907–8.** | | | | | | | | | | | | |
| 1 | ...... | 1.55 | 1.25 | 1.8 | 1.5 | 1.5 | 2.1 | 3.0 | 2.5 | ...... | 4.2 | 1.0 |
| 2 | ...... | 1.5 | 1.2 | 1.7 | 1.5 | 1.45 | 2.1 | 3.0 | 2.5 | 1.9 | 3.5 | 1.0 |
| 3 | ...... | 1.5 | 1.2 | 1.75 | 1.45 | 1.4 | 2.2 | 3.05 | 2.55 | 1.9 | 1.5 | 1.0 |
| 4 | ...... | 1.5 | 1.3 | 1.45 | 1.45 | 1.4 | 2.2 | 3.0 | 2.6 | 1.8 | 1.3 | .95 |
| 5 | 1.5 | 1.5 | 1.35 | 1.5 | 1.45 | 1.4 | 2.2 | 2.9 | 2.5 | 1.8 | 1.3 | .95 |
| 6 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.45 | 2.25 | 2.9 | 2.5 | 1.8 | 1.2 | 1.0 |
| 7 | 1.5 | 1.5 | 1.65 | 1.45 | 1.45 | 1.45 | 2.2 | 2.8 | 2.5 | 1.7 | 1.2 | .9 |
| 8 | 1.5 | 1.6 | 1.6 | 1.45 | 1.4 | 1.5 | 2.25 | 2.9 | 2.5 | 1.65 | 1.2 | .9 |
| 9 | 1.5 | 1.55 | 1.7 | 1.5 | 1.4 | 1.55 | 2.3 | 2.8 | 2.45 | 1.5 | 1.25 | .95 |
| 10 | 1.5 | 1.55 | 1.8 | 1.45 | 1.4 | 1.55 | 2.35 | 2.8 | 2.5 | 1.5 | 1.2 | 1.0 |
| 11 | 1.45 | 1.5 | 1.75 | 1.45 | 1.4 | 1.5 | 2.35 | 2.7 | 2.5 | 1.4 | 1.15 | 1.1 |
| 12 | 1.5 | 1.55 | 1.7 | 1.5 | 1.4 | 1.55 | 2.4 | 2.75 | 2.5 | 1.35 | 1.1 | 1.1 |
| 13 | 1.5 | 1.55 | 1.6 | 1.4 | 1.4 | 1.55 | 2.45 | 2.65 | 2.5 | 1.4 | 1.1 | 1.1 |
| 14 | 1.5 | 1.55 | 1.5 | 1.4 | 1.4 | 1.6 | 2.4 | 2.65 | 2.45 | 1.35 | 1.1 | .95 |
| 15 | 1.5 | 1.5 | 1.5 | 1.4 | 1.45 | 1.7 | 2.45 | 2.65 | 2.4 | 1.3 | 1.0 | 1.0 |
| 16 | 1.55 | 1.5 | 1.55 | 1.4 | 1.4 | 1.8 | 2.5 | 2.6 | 2.35 | 1.2 | 1.0 | 1.0 |
| 17 | 1.55 | 1.45 | 1.5 | 1.4 | 1.4 | 1.8 | 2.5 | 2.6 | 2.3 | 1.0 | 1.15 | 1.0 |
| 18 | 1.5 | 1.4 | 1.5 | 1.4 | 1.35 | 1.8 | 2.5 | 2.55 | 2.3 | 1.0 | 1.1 | 1.0 |
| 19 | 1.55 | 1.4 | ...... | 1.4 | 1.35 | 1.8 | 2.55 | 2.5 | 2.35 | .9 | 1.1 | 1.05 |
| 20 | 1.6 | 1.3 | ...... | 1.45 | 1.4 | 1.9 | 2.6 | 2.5 | 2.35 | ...... | 1.1 | 1.05 |
| 21 | 1.6 | 1.25 | ...... | 1.4 | 1.45 | 1.9 | 2.6 | 2.55 | 2.3 | ...... | 1.0 | 1.0 |
| 22 | 1.55 | 1.3 | 1.55 | 1.45 | 1.45 | 1.95 | 2.6 | 2.5 | 2.3 | ...... | 1.1 | .95 |
| 23 | 1.5 | 1.4 | 1.5 | 1.45 | 1.5 | 1.9 | 2.7 | 2.6 | 2.2 | ...... | 1.1 | .95 |
| 24 | 1.7 | 1.4 | 1.55 | 1.4 | 1.5 | 1.95 | 2.8 | 2.55 | 2.1 | .95 | 1.15 | .9 |
| 25 | 1.75 | 1.5 | 1.6 | 1.4 | 1.5 | 1.95 | 2.7 | 2.5 | 2.0 | 1.0 | 1.15 | .9 |
| 26 | 1.8 | 1.5 | 1.6 | 1.4 | 1.5 | 1.95 | 2.65 | 2.5 | 1.95 | 1.0 | 1.1 | .9 |
| 27 | 1.75 | 1.4 | 1.9 | 1.45 | 1.6 | 2.0 | 2.7 | 2.5 | 1.9 | 1.1 | 1.1 | .95 |
| 28 | 1.6 | 1.3 | 1.85 | 1.5 | 1.65 | 2.0 | 2.8 | 2.5 | 1.9 | 1.2 | 1.1 | .9 |
| 29 | 1.6 | 1.2 | 1.85 | 1.5 | 1.6 | 2.0 | 2.9 | 2.55 | 1.85 | 1.2 | 1.1 | .95 |
| 30 | 1.55 | 1.2 | 1.8 | 1.5 | ...... | 2.0 | 3.0 | 2.6 | 1.9 | 1.1 | 1.05 | .95 |
| 31 | 1.55 | ...... | 1.8 | 1.5 | ...... | 2.0 | ...... | 2.5 | ...... | 1.1 | 1.0 | ...... |

[a] The gage was washed out May 18, 1907, and replaced at a different datum June 8, at Woodfords.

*Rating tables for West Fork of Carson River at Woodfords, Cal.*

**October 18, 1900, to December 31, 1901.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 2.00 | 5 | 3.00 | 112 | 4.00 | 335 | 5.00 | 700 |
| 2.20 | 28 | 3.20 | 147 | 4.20 | 396 | 5.20 | 794 |
| 2.40 | 41 | 3.40 | 187 | 4.40 | 461 | 5.40 | 895 |
| 2.60 | 60 | 3.60 | 232 | 4.60 | 533 | | |
| 2.80 | 83 | 3.80 | 281 | 4.80 | 613 | | |

**January 1 to December 31, 1902.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.4 | 2 | 2.4 | 42 | 3.4 | 147 | 4.4 | 342 |
| 1.6 | 5 | 2.6 | 57 | 3.6 | 179 | 4.6 | 393 |
| 1.8 | 2 | 2.8 | 75 | 3.8 | 213 | 4.8 | 448 |
| 2.0 | 20 | 3.0 | 96 | 4.0 | 252 | 5.0 | 506 |
| 2.2 | 30 | 3.2 | 120 | 4.2 | 295 | | |

**January 1 to December 31, 1903.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.7 | 45 | 3.5 | 149 | 4.3 | 268 | 5.1 | 412 |
| 2.8 | 54 | 3.6 | 161 | 4.4 | 286 | 5.2 | 430 |
| 2.9 | 63 | 3.7 | 174 | 4.5 | 304 | 5.3 | 448 |
| 3.0 | 83 | 3.8 | 188 | 4.6 | 322 | 5.4 | 466 |
| 3.1 | 103 | 3.9 | 202 | 4.7 | 340 | 5.5 | 484 |
| 3.2 | 114 | 4.0 | 217 | 4.8 | 358 | | |
| 3.3 | 125 | 4.1 | 233 | 4.9 | 376 | | |
| 3.4 | 137 | 4.2 | 250 | 5.0 | 394 | | |

NOTE.—Table well defined below gage height 4.20 feet; below gage height 2.70 feet it is the same as the 1902 table.

**January 1 to December 31, 1904.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.20 | 36 | 3.30 | 125 | 4.40 | 304 | 5.50 | 657 |
| 2.30 | 42 | 3.40 | 140 | 4.50 | 327 | 5.60 | 697 |
| 2.40 | 48 | 3.50 | 154 | 4.60 | 352 | 5.70 | 737 |
| 2.50 | 54 | 3.60 | 168 | 4.70 | 379 | 5.80 | 779 |
| 2.60 | 61 | 3.70 | 182 | 4.80 | 408 | 5.90 | 823 |
| 2.70 | 69 | 3.80 | 197 | 4.90 | 439 | 6.00 | 869 |
| 2.80 | 77 | 3.90 | 213 | 5.00 | 472 | 6.10 | 916 |
| 2.90 | 86 | 4.00 | 229 | 5.10 | 507 | 6.20 | 964 |
| 3.00 | 96 | 4.10 | 246 | 5.20 | 543 | 6.30 | 1,012 |
| 3.10 | 106 | 4.20 | 264 | 5.30 | 580 | 6.40 | 1,060 |
| 3.20 | 116 | 4.30 | 283 | 5.40 | 618 | 6.50 | 1,110 |

NOTE.—Table applicable only to open channel. It is based upon discharge measurements made during 1902 to 1904, inclusive, and poorly defined.

**January 1 to December 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.00 | 20 | 2.70 | 74 | 3.30 | 146 | 3.90 | 251 |
| 2.10 | 26 | 2.80 | 84 | 3.40 | 161 | 4.00 | 272 |
| 2.20 | 32 | 2.90 | 95 | 3.50 | 177 | 4.10 | 294 |
| 2.30 | 40 | 3.00 | 107 | 3.60 | 194 | 4.20 | 318 |
| 2.40 | 48 | 3.10 | 119 | 3.70 | 212 | 4.30 | 343 |
| 2.50 | 56 | 3.20 | 132 | 3.80 | 231 | 4.40 | 370 |
| 2.60 | 65 | | | | | | |

NOTE.—Table is applicable only to open channel. It is based on 15 discharge measurements made during 1905, and fairly well defined.

**January 1, 1906, to May 17, 1907.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.70 | 69 | 3.70 | 226 | 4.70 | 535 | 5.70 | 960 |
| 2.80 | 79 | 3.80 | 251 | 4.80 | 570 | 5.80 | 1,010 |
| 2.90 | 90 | 3.90 | 277 | 4.90 | 610 | 5.90 | 1,060 |
| 3.00 | 102 | 4.00 | 305 | 5.00 | 650 | 6.00 | 1,110 |
| 3.10 | 115 | 4.10 | 335 | 5.10 | 690 | 6.10 | 1,165 |
| 3.20 | 129 | 4.20 | 365 | 5.20 | 730 | 6.20 | 1,220 |
| 3.30 | 145 | 4.30 | 396 | 5.30 | 775 | 6.30 | 1,275 |
| 3.40 | 163 | 4.40 | 430 | 5.40 | 820 | 6.40 | 1,330 |
| 3.50 | 182 | 4.50 | 465 | 5.50 | 865 | 6.50 | 1,390 |
| 3.60 | 203 | 4.60 | 500 | 5.60 | 910 | 6.60 | 1,450 |

Table applicable only to open channel. It is based on discharge measurements made during 1906, and is well defined.

*Daily discharge, in second-feet, of West Fork of [illegible] River at [illegible], for 1907–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1907. | | | | | | | | | |
| 1 | 64 | 98 | 136 | [illegible] | 610 | 70 | 92 | [illegible] | [illegible] |
| 2 | 64 | 146 | 127 | 182 | [illegible] | 73 | [illegible] | [illegible] | [illegible] |
| 3 | 64 | 146 | [illegible] | 192 | [illegible] | 70 | [illegible] | [illegible] | [illegible] |
| 4 | 64 | 154 | 136 | 192 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 86 | 163 | 136 | 205 | [illegible] | [illegible] | 73 | 36 | [illegible] |
| 6 | 90 | 182 | 130 | 223 | 656 | [illegible] | [illegible] | 36 | [illegible] |
| 7 | 90 | [illegible] | 130 | 235 | 636 | 430 | [illegible] | 36 | [illegible] |
| 8 | 90 | 146 | 136 | 235 | [illegible] | [illegible] | 546 | 36 | [illegible] |
| 9 | 90 | 136 | 136 | 244 | 650 | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | 79 | 136 | 127 | 250 | 656 | 710 | 494 | [illegible] | [illegible] |
| 11 | 79 | 146 | 127 | 285 | 656 | 564 | 546 | 256 | [illegible] |
| 12 | 84 | 154 | 127 | 300 | 656 | 564 | [illegible] | 256 | 107 |
| 13 | 79 | 154 | [illegible] | [illegible] | 656 | [illegible] | 466 | 256 | 107 |
| 14 | 79 | 146 | [illegible] | 636 | 790 | [illegible] | [illegible] | [illegible] | 107 |
| 15 | 79 | 146 | 182 | 560 | 910 | [illegible] | 446 | 226 | 107 |
| 16 | 74 | 146 | 106 | 656 | 1,010 | 710 | 427 | 240 | 107 |
| 17 | 69 | 146 | 205 | 610 | 1,430 | [illegible] | 461 | [illegible] | 107 |
| 18 | 66 | 235 | 222 | [illegible] | 1,490 | 564 | [illegible] | 210 | 97 |
| 19 | 69 | 222 | 223 | 730 | 1,300 | [illegible] | 466 | 182 | 97 |
| 20 | 74 | [illegible] | 610 | 690 | 1,300 | [illegible] | 466 | [illegible] | 97 |
| 21 | 74 | 230 | 262 | 610 | 1,100 | 564 | [illegible] | [illegible] | 97 |
| 22 | 74 | 237 | 235 | 656 | 1,050 | 564 | 546 | [illegible] | 97 |
| 23 | 69 | 235 | 297 | 690 | 1,090 | 564 | 465 | 164 | 97 |
| 24 | 69 | 230 | 285 | 750 | 950 | [illegible] | 466 | 154 | 86 |
| 25 | 69 | 187 | 262 | 910 | [illegible] | [illegible] | 466 | 146 | 86 |
| 26 | 74 | 130 | 252 | 730 | [illegible] | 710 | 427 | [illegible] | 86 |
| 27 | 84 | 130 | 235 | 656 | [illegible] | 745 | [illegible] | [illegible] | 86 |
| 28 | 64 | 130 | 214 | 610 | [illegible] | [illegible] | 4[illegible] | [illegible] | 86 |
| 29 | 79 | ........ | 182 | 656 | [illegible] | 1,[illegible] | 446 | [illegible] | 86 |
| 30 | 74 | ........ | 182 | 610 | 750 | [illegible] | 547 | [illegible] | 79 |
| 31 | 74 | ........ | 172 | ........ | 760 | ........ | 300 | [illegible] | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 79 | 74 | 30 | 97 | 70 | 70 | 137 | 290 | 192 | 107 | 643 | 36 |
| 2 | 79 | 70 | 47 | 66 | 70 | 66 | 130 | 290 | 192 | 107 | 43 | 36 |
| 3 | 79 | 70 | 47 | 92 | 66 | 62 | 145 | 305 | 201 | 107 | 70 | 36 |
| 4 | 79 | 70 | 54 | 66 | 66 | 62 | 145 | 290 | 210 | 97 | 54 | 54 |
| 5 | 70 | 70 | 56 | 70 | 66 | 62 | 145 | 273 | 192 | 97 | 54 | 34 |
| 6 | 70 | 70 | 70 | 70 | 70 | 66 | 132 | 273 | 192 | 97 | 47 | 36 |
| 7 | 70 | 70 | 84 | 66 | 66 | 66 | 145 | 251 | 192 | 88 | 47 | 37 |
| 8 | 70 | 79 | 79 | 66 | 62 | 70 | 132 | 273 | 182 | 84 | 47 | 37 |
| 9 | 70 | 74 | 66 | 70 | 62 | 74 | 160 | 250 | 184 | 70 | 51 | 54 |
| 10 | 70 | 74 | 97 | 66 | 62 | 74 | 168 | 250 | 192 | 70 | 47 | 36 |
| 11 | 66 | 70 | 92 | 66 | 62 | 70 | 168 | 230 | 192 | 62 | 44 | 41 |
| 12 | 70 | 74 | 66 | 70 | 62 | 74 | 175 | 240 | 192 | 58 | 42 | 41 |
| 13 | 70 | 74 | 79 | 62 | 62 | 74 | 184 | 220 | 192 | 62 | 41 | 41 |
| 14 | 70 | 74 | 70 | 62 | 62 | 79 | 175 | 220 | 184 | 58 | 41 | 34 |
| 15 | 70 | 70 | 70 | 62 | 66 | 88 | 184 | 220 | 175 | 54 | 36 | 36 |
| 16 | 74 | 70 | 74 | 62 | 62 | 97 | 192 | 210 | 168 | 47 | 36 | 36 |
| 17 | 74 | 66 | 70 | 62 | 62 | 97 | 192 | 210 | 160 | 36 | 44 | 36 |
| 18 | 70 | 62 | 70 | 62 | 58 | 97 | 192 | 201 | 160 | 36 | 41 | 36 |
| 19 | 74 | 62 | 70 | 62 | 58 | 97 | 201 | 192 | 168 | 31 | 41 | 38 |
| 20 | 79 | 54 | 70 | 66 | 62 | 107 | 210 | 192 | 168 | 26 | 41 | 38 |
| 21 | 79 | 50 | 74 | 62 | 66 | 107 | 210 | 201 | 160 | 26 | 36 | 36 |
| 22 | 74 | 54 | 74 | 66 | 66 | 112 | 210 | 192 | 160 | 26 | 41 | 34 |
| 23 | 70 | 62 | 70 | 66 | 70 | 107 | 230 | 210 | 145 | 31 | 41 | 34 |
| 24 | 88 | 62 | 74 | 62 | 70 | 112 | 250 | 201 | 130 | 54 | 44 | 31 |
| 25 | 92 | 70 | 79 | 62 | 70 | 112 | 230 | 192 | 117 | 36 | 44 | 31 |
| 26 | 97 | 70 | 79 | 62 | 70 | 112 | 220 | 192 | 112 | 36 | 41 | 31 |
| 27 | 92 | 62 | 107 | 66 | 79 | 117 | 230 | 192 | 107 | 41 | 41 | 34 |
| 28 | 79 | 54 | 102 | 70 | 84 | 117 | 250 | 192 | 107 | 47 | 41 | 31 |
| 29 | 79 | 47 | 102 | 70 | 79 | 117 | 273 | 201 | 102 | 47 | 41 | 34 |
| 30 | 74 | 47 | 97 | 70 | ........ | 117 | 296 | 210 | 107 | 41 | 38 | 34 |
| 31 | 74 | ........ | 97 | 70 | ........ | 117 | ........ | 192 | ........ | 41 | 36 | ........ |

[illegible] Trondhjem [illegible]

[illegible]

*Daily discharge, in second-feet, of West Fork of Carson River at Woodfords, Cal., for 1907-1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1910-11.** | | | | | | | | | | | | |
| 1 | 26 | 31 | 76 | 24 | 48 | 45 | 200 | 318 | 785 | 520 | 148 | 50 |
| 2 | 26 | 31 | 97 | 24 | 45 | 45 | 240 | 332 | 885 | 482 | 148 | 50 |
| 3 | 2 | 31 | 79 | 24 | 42 | 45 | 240 | 445 | 1,040 | 520 | 140 | 49 |
| 4 | 2 | 31 | 41 | 30 | 52 | 42 | 230 | 560 | 1,040 | 560 | 134 | 48 |
| 5 | 3 | 28 | 41 | 30 | 52 | 39 | 190 | 600 | 1,080 | 560 | 127 | 47 |
| 6 | 4 | 28 | 47 | 33 | 68 | 42 | 172 | 378 | 935 | 560 | 120 | 47 |
| 7 | 5 | 21 | 54 | 33 | 72 | 42 | 164 | 362 | 985 | 520 | 106 | 47 |
| 8 | 6 | 21 | 54 | 30 | 68 | 39 | 172 | 445 | 885 | 520 | 100 | 48 |
| 9 | 7 | 21 | 54 | 48 | 68 | 39 | 164 | 410 | 985 | 520 | 95 | 49 |
| 10 | 7 | 21 | 54 | 24 | 68 | 36 | 134 | 482 | 1,080 | 378 | 95 | 50 |
| 11 | 10 | 31 | 54 | 22 | 64 | 36 | 127 | 445 | 1,190 | 410 | 92 | 50 |
| 12 | 14 | 31 | 62 | 20 | 60 | 36 | 124 | 520 | 1,040 | 378 | 89 | 47 |
| 13 | 19 | 36 | 62 | 20 | 56 | 39 | 120 | 520 | 1,240 | 410 | 85 | 47 |
| 14 | 20 | 36 | 47 | 22 | 52 | 39 | 113 | 410 | 1,190 | 410 | 85 | 47 |
| 15 | 20 | 31 | 36 | 24 | 52 | 39 | 106 | 362 | 1,190 | 378 | 85 | 47 |
| 16 | 20 | 28 | 36 | 27 | 52 | 42 | 106 | 378 | 1,190 | 410 | 85 | 47 |
| 17 | 2 | 28 | 34 | 24 | 52 | 45 | 127 | 346 | 1,190 | 378 | 82 | 47 |
| 18 | 2 | 26 | 31 | 24 | 52 | 45 | 164 | 520 | 1,080 | 341 | 79 | 47 |
| 19 | 2 | 26 | 34 | 22 | 48 | 48 | 200 | 560 | 1,080 | 304 | 76 | 47 |
| 20 | 2 | 21 | 26 | 39 | 48 | 52 | 200 | 690 | 1,080 | 304 | 76 | 44 |
| 21 | 2 | 21 | 26 | 30 | 48 | 52 | 200 | 735 | 935 | 285 | 72 | 41 |
| 22 | 2 | 24 | 31 | 30 | 52 | 60 | 264 | 985 | 935 | 264 | 68 | 41 |
| 23 | 2 | 26 | 31 | 30 | 51 | 68 | 318 | 1,300 | 645 | 248 | 68 | 41 |
| 24 | 2 | 26 | 36 | 33 | 50 | 68 | 362 | 935 | 560 | 234 | 68 | 41 |
| 25 | 2 | 26 | 36 | 30 | 49 | 68 | 410 | 735 | 520 | 220 | 68 | 41 |
| 26 | 2 | 26 | 34 | 30 | 48 | 72 | 410 | 735 | 560 | 205 | 68 | 43 |
| 27 | 2 | 26 | 31 | 30 | 47 | 80 | 378 | 835 | 690 | 190 | 68 | 45 |
| 28 | 2 | 34 | 26 | 27 | 46 | 95 | 318 | 785 | 785 | 190 | 62 | 47 |
| 29 | 2 | 34 | 26 | 52 | ...... | 106 | 264 | 835 | 645 | 184 | 57 | 47 |
| 30 | 2 | 55 | 26 | 72 | ...... | 127 | 240 | 735 | 560 | 178 | 52 | 47 |
| 31 | 31 | ...... | 26 | 60 | ...... | 148 | ...... | 600 | ...... | 172 | 51 | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1911.** | | | | **1911.** | | | | **1911.** | | | |
| 1 | 47 | 41 | 79 | 11 | 41 | 47 | 54 | 21 | 41 | 62 | 47 |
| 2 | 47 | 41 | 79 | 12 | 41 | 47 | 54 | 22 | 41 | 62 | 41 |
| 3 | 47 | 41 | 74 | 13 | 41 | 47 | 54 | 23 | 41 | 66 | 41 |
| 4 | 47 | 41 | 70 | 14 | 41 | 54 | 54 | 24 | 41 | 70 | 41 |
| 5 | 47 | 41 | 70 | 15 | 41 | 54 | 47 | 25 | 41 | 74 | 41 |
| 6 | 44 | 41 | 62 | 16 | 41 | 54 | 47 | 26 | 41 | 77 | 41 |
| 7 | 41 | 44 | 62 | 17 | 41 | 54 | 47 | 27 | 41 | 79 | 41 |
| 8 | 41 | 47 | 62 | 18 | 41 | 58 | 47 | 28 | 41 | 79 | 41 |
| 9 | 41 | 47 | 62 | 19 | 41 | 60 | 47 | 29 | 41 | 79 | 41 |
| 10 | 41 | 47 | 58 | 20 | 41 | 62 | 47 | 30 | 41 | 84 | 41 |
| | | | | | | | | 31 | 41 | ...... | 44 |

NOTE.—Daily discharge determined from fairly well defined rating curves applicable as follows: Jan. 1 to June 17, 1907; June 18, 1911, to Dec. 31, 1910, and Sept. 1 to Dec. 31, 1911; Jan. 1 to Aug. 31, 1911. Discharge interpolated or estimated for days on which gage was not read. Discharge during August, September, and October, 1910, are for the station at the bridge. Water was being diverted between the cable and the bridge during these months. Discharge for 1912 withheld awaiting data in regard to the diversions.

*Monthly discharge of West Fork of Carson River at Woodfords, Cal., for [illegible].*

[Drainage area, 70 square miles.]

| Month. | Discharge in second-feet. Mean. | Per square mile. | Run-off. Depth in inches on drainage area. | Total in acre-feet. |
|---|---|---|---|---|
| **[illegible]** | | | | |
| April | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] |
| August | 135 | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] |
| The period. | | | | [illegible] |
| **[illegible]** | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| May | 134 | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] |
| September | 41 | [illegible] | [illegible] | [illegible] |
| **[illegible]** | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] |
| The period. | | | | [illegible] |

*Monthly discharge of West Fork of Carson River at Woodfords, Cal., for 1900–1902.*

[Drainage area, 70 square miles.]

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Per square mile. | Run-off. Depth in inches on drainage area. | Total in acre-feet. | Accuracy. |
|---|---|---|---|---|---|---|---|
| **1900–1901.** | | | | | | | |
| October 18–31 | | | 44 | 0.63 | 0.33 | 1,222 | |
| November | 40 | 37 | 49 | .69 | .77 | 2,856 | |
| December | 71 | 37 | 53 | .76 | .87 | 3,259 | |
| January | 66 | 41 | 51 | .73 | .84 | 3,136 | |
| February | 256 | 41 | 111 | 1.59 | 1.65 | 6,165 | |
| March | 256 | 121 | 170 | 2.43 | 2.80 | 10,453 | |
| April | 412 | 121 | 234 | 3.34 | 3.73 | 13,924 | |
| May | 606 | 206 | 474 | 6.80 | 7.84 | 29,268 | |
| June | 396 | 157 | 290 | 4.13 | 4.61 | 17,197 | |
| July | 187 | 97 | 136 | 1.94 | 2.24 | 8,363 | |
| August | 166 | 50 | 77 | 1.10 | 1.27 | 4,735 | |
| September | 50 | 41 | 43 | .61 | .69 | 2,550 | |
| The period | | | | | | 103,000 | |
| **1901–2.** | | | | | | | |
| October | 60 | 41 | 49 | .70 | .81 | 3,013 | |
| November | 60 | 50 | 56 | .80 | .89 | 3,332 | |
| December | 112 | 60 | 92 | 1.17 | 1.35 | 5,042 | |
| January | 195 | 75 | 107 | 1.53 | 1.76 | 6,579 | |
| February | 318 | 162 | 238 | 3.40 | 3.54 | 13,218 | |
| March | 393 | 57 | 138 | 1.97 | 2.27 | 8,485 | |
| April | 232 | 108 | 175 | 2.50 | 2.79 | 10,413 | |
| May | 448 | 178 | 287 | 4.10 | 4.73 | 17,647 | |
| June | 393 | 252 | 319 | 4.56 | 5.09 | 18,982 | |
| July | 296 | 57 | 121 | 1.73 | 1.99 | 7,440 | |
| August | 57 | 36 | 40 | .57 | .66 | 2,460 | |
| September | 36 | 30 | 32 | .46 | .51 | 1,904 | |
| The year | 448 | 30 | 137 | 1.96 | 26.39 | 98,500 | |

*Monthly discharge of West Fork of Carson River at Woodfords, Cal., for 1900–1911*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1902–3.** | | | | | | | |
| October | 42 | 30 | 34 | .49 | .56 | 2,091 | |
| November | 57 | 36 | 46 | .66 | .74 | 2,737 | |
| December | 75 | 49 | 58 | .83 | .96 | 3,566 | |
| January | 93 | 36 | 49 | .70 | .81 | 3,013 | |
| February | 83 | 49 | 63 | .90 | .94 | 3,499 | |
| March | 114 | 42 | 64 | .91 | 1.05 | 3,935 | |
| April | 340 | 83 | 174 | 2.49 | 2.78 | 10,354 | |
| May | 502 | 286 | 389 | 5.56 | 6.41 | 23,919 | |
| June | 448 | 202 | 353 | 5.04 | 5.62 | 21,006 | |
| July | 174 | 65 | 106 | 1.51 | 1.74 | 6,518 | |
| August | 65 | 30 | 42 | .60 | .69 | 2,582 | |
| September | 33 | 25 | 30 | .43 | .48 | 1,785 | |
| The year | 502 | 25 | 117 | 1.68 | 22.78 | 85,000 | |
| **1903–4.** | | | | | | | |
| October | 36 | 27 | 31 | .44 | .51 | 1,906 | |
| November | 98 | 30 | 63 | .90 | 1.00 | 3,749 | |
| December | 78 | 45 | 66 | .94 | 1.08 | 4,058 | |
| January 1–30 | 63 | 47 | 53.8 | .769 | .86 | 3,201 | |
| February 7–29 | 322 | 53 | 134 | 1.63 | 1.91 | 6,113 | |
| March | 208 | 128 | 169 | 2.41 | 2.78 | 10,390 | |
| April | 729 | 84 | 305 | 4.36 | 4.86 | 18,150 | |
| May | 1,085 | 176 | 651 | 9.30 | 10.72 | 40,030 | |
| June | 543 | 224 | 368 | 5.26 | 5.87 | 21,900 | |
| July | 200 | 105 | 158 | 2.26 | 2.61 | 9,715 | |
| August | 110 | 53 | 74.4 | 1.06 | 1.22 | 4,575 | |
| September | 191 | 44 | 67.1 | .959 | 1.07 | 3,993 | |
| **1904–5.** | | | | | | | |
| October | 106 | 63 | 78.4 | 1.12 | 1.29 | 4,821 | |
| November | 75 | 59 | 64.6 | .923 | 1.03 | 3,844 | |
| December | 121 | 47 | 64.5 | .921 | 1.06 | 3,966 | |
| January 8–31 | 113 | 81 | 91.0 | 1.30 | 1.16 | 4,332 | |
| February | 124 | 85 | 102 | 1.46 | 1.52 | 5,665 | |
| March | 177 | 94 | 125 | 1.79 | 2.06 | 7,686 | |
| April | 348 | 94 | 202 | 2.89 | 3.22 | 12,020 | |
| May | 370 | 194 | 271 | 3.87 | 4.46 | 16,660 | |
| June | 241 | 124 | 187 | 2.67 | 2.98 | 11,130 | |
| July | 124 | 40 | 75.8 | 1.08 | 1.24 | 4,661 | |
| August | 44 | 20 | 28.7 | .410 | .47 | 1,765 | |
| September | 33 | 20 | 23.7 | .339 | .38 | 1,410 | |
| **1905–6.** | | | | | | | |
| October | 33 | 26 | 31.3 | .447 | .52 | 1,925 | |
| November | 52 | 33 | 34.4 | .491 | .55 | 2,047 | |
| December | 70 | 40 | 56.5 | .807 | .93 | 3,474 | |
| January | 129 | 37 | 72.3 | 1.03 | 1.19 | 4,450 | |
| February | 94 | 44 | 65.3 | .933 | .97 | 3,630 | |
| March | 102 | 44 | 66.5 | .950 | 1.10 | 4,090 | |
| April | 865 | 52 | 236 | 3.37 | 3.76 | 14,000 | |
| May | 1,570 | 460 | 925 | 13.20 | 15.22 | 56,900 | |
| June | 1,010 | 430 | 690 | 9.86 | 11.00 | 41,100 | |
| July | 570 | 129 | 324 | 4.63 | 5.34 | 19,900 | |
| August | 277 | 116 | 154 | 2.20 | 2.54 | 9,470 | |
| September | 103 | 31 | 50.4 | .720 | .80 | 3,000 | |
| The year | 1,570 | 26 | 225 | 3.22 | 43.92 | 164,000 | |
| **1906–7.** | | | | | | | |
| October | 65 | 44 | 52.8 | .754 | .87 | 3,250 | |
| November | 145 | 28 | 76.9 | 1.10 | 1.23 | 4,580 | |
| December | 90 | 22 | 58.4 | .834 | .96 | 3,590 | |
| January | 90 | 69 | 78.8 | 1.13 | 1.30 | 4,850 | C. |
| February | 182 | 84 | 139 | 1.99 | 2.07 | 7,720 | B. |
| March | 552 | 102 | 211 | 3.01 | 3.47 | 13,000 | B. |
| April | 910 | 172 | 502 | 7.17 | 8.00 | 29,900 | B. |
| May | 1,450 | 570 | 841 | 12.0 | 13.83 | 51,700 | C. |
| June | 1,020 | 519 | 664 | 9.49 | 10.59 | 39,500 | C. |
| July | 920 | 296 | 525 | 7.50 | 8.65 | 32,300 | C. |
| August | 347 | 117 | 223 | 3.19 | 3.68 | 13,700 | A. |
| September | 145 | 79 | 107 | 1.53 | 1.71 | 6,370 | C. |
| The year | 1,450 | 22 | 290 | 4.14 | 56.36 | 210,000 | |

[illegible] —Continued.

| Month | Discharge in second-feet. | | | | Run-off. | | |
|---|---|---|---|---|---|---|---|
| | Maximum | Minimum | Mean | Per square mile | Depth in inches on drainage area | Total in acre-feet | Accuracy |
| [illegible] | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3 |

[illegible] Discharge interpolated or estimated for days [illegible] are for the [illegible] the Stone & Webster Engineering Corporation.

## EAST FORK OF CARSON RIVER AT SILVER KING VALLEY, NEAR MARKLEEVILLE, CAL.

This station, which is located at the lower end of Silver King Valley, in the NE. ¼ sec. 2, T. 8 N., R. 21 E., in the Mono National Forest, 300 feet above the mouth of Bagley Creek and about 12 miles southeast of Markleeville, was established in November, 1910. The records for 1911 are fragmentary.

The gage is a vertical staff installed March 30, 1911; it is fastened to a tamarack tree on the left bank near the dam site. Previous to this date the gage was located a short distance above the present site. The original datum has not been maintained. The bed of the stream is composed of gravel and appears permanent.

Discharge measurements are made from car and cable 600 feet above the gage.

The relation between gage height and discharge during the winter months is affected by ice.

Discharge measurements made by the Stone & Webster Engineering Corporation have been furnished the United States Geological Survey for publication.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of East Fork of Carson River at Silver King Valley near Markleeville, Cal., in 1911-12.*

| Date. | Hydrographer | Gage height. | Discharge. |
|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* |
| Mar. 30 | Stone & Webster Engineering Corporation | 2.4[illegible] | [illegible] |
| July 29 | Peekema and Murphy | [illegible] | [illegible] |
| 1912. | | | |
| June 22 | H. J. Tompkins | 2.4[illegible] | 212 |

*Daily gage height, in feet, of East Fork of Carson River at Silver King Valley, near Markleeville, Cal., for 1911-12.*

| Day. | Apr. | May. | June. | July. | Aug. | Sept. | Day. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | 1911. | | | | | | |
| 1 | | | | | | | [illegible] | | | | | | |
| 2 | | | | | | | [illegible] | | | | | | |
| 3 | | | | | | | [illegible] | | | | | | |
| 4 | | | | | | | [illegible] | | | | | | |
| 5 | | | | | | | [illegible] | | [illegible] | | | | [illegible] |
| 6 | | | | | | | [illegible] | | | | | | |
| 7 | 2.5 | | | | | | [illegible] | [illegible] | | | | | [illegible] |
| 8 | | | | | | | [illegible] | | | [illegible] | | | |
| 9 | | | | | | | [illegible] | | | | | | |
| 10 | | | | | | | [illegible] | | | | | | |
| 11 | | | | | | | [illegible] | | | | [illegible] | | |
| 12 | | | | | | | [illegible] | | [illegible] | | | | |
| 13 | | 2.55 | | | | | [illegible] | | | | | | |
| 14 | 2.4 | | | | 2.1 | | [illegible] | [illegible] | | [illegible] | [illegible] | | |
| 15 | | | | | | | [illegible] | | | | | | |
| | | | | | | | [illegible] | | | | | | |

*Daily gage height, in feet, of East Fork of Carson River at Silver King Valley, near Markleeville, Cal., for 1911-12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Mar. | June. | Day. | Oct. | Nov. | Dec. | Jan. | Mar. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | 1911-12. | | | | | | |
| 1 | | | | | 1.7 | | 16 | | | | | 1.6 | |
| 2 | | | | | | | 17 | | | | | | |
| 3 | | | | 3.1 | | | 18 | | | | | | |
| 4 | | | | | | | 19 | | | | | | |
| 5 | | | | | | | 20 | | | | | | |
| 6 | | | | | | | 21 | | 1.7 | | | | |
| 7 | | | | | | | 22 | | | | | | 2.45 |
| 8 | | | | | | | 23 | | | | | | |
| 9 | | | | | | | 24 | | | | | | |
| 10 | | | | | | | 25 | | | | | | |
| 11 | | | | | | 2.85 | 26 | | | | | | |
| 12 | | | | | | | 27 | | | | | | |
| 13 | | | | | | 2.85 | 28 | | | | | | |
| 14 | | | 2.2 | | | | 29 | | | | | | |
| 15 | | | | 2.05 | | | 30 | | | | | | |
| | | | | | | | 31 | 1.79 | | | | | |

NOTE.—New gage installed Mar. 30, 1911.

## EAST FORK OF CARSON RIVER NEAR MARKLEEVILLE, CAL.

This station, which is located at Hangman's Bridge, 2 miles east of Markleeville, in the NE. ¼ sec. 27, T. 10 N., R. 20 E., was established November 13, 1910.

Indian Creek enters 100 feet above and Markleeville Creek 1¼ miles below the station. All water diverted above Hangman's Bridge is used for power development. The discharge, as measured at this station, represents the natural run-off, except that the low-water flow during the irrigation season is augmented by a small amount of water stored on Silver Creek. Practically the entire low-water flow of the East and West forks of the Carson is used for the irrigation of Carson Valley.

The gage is a vertical staff bolted to the solid rock on the right bank 75 feet below the bridge.

At low and medium stages discharge measurements are made by wading; high-stage measurements are made from a car and cable about 3 miles above the gage.

The channel is composed of gravel and small bowlders and appears permanent. Both banks are high and will not overflow.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of East Fork of Carson River near Markleeville, Cal., in 1910-1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-feet.* | 1911. | | *Feet.* | *Sec.-feet.* |
| Oct. 11 | H. D. McGlashan | 2.50 | 50 | July 28 | G. T. Peckham | 4.85 | 517 |
| | | | | Nov. 7 | J. E. Stewart | 2.87 | 78 |
| 1911. | | | | 1912. | | | |
| Apr. 11 | J. E. Stewart | 4.28 | 428 | June 21 | H. J. Tompkins | 4.32 | 419 |
| June 12 | do | 7.50 | 2,020 | | | | |
| 23 | do | 6.50 | 1,640 | | | | |

*Daily gage height, in feet, of East Fork of Carson River near Markleeville, Cal., for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | |
| 1 | | 2.55 | 2.30 | 4.30 | 3.00 | 4.9 | 5.2 | 5.15 | | | |
| 2 | | 2.58 | 2.00 | 3.95 | | | 5.1 | 6.5 | | | 3.25 |
| 3 | | 3.18 | 2.75 | 3.5 | 2.90 | 5.25 | 5.4 | | 6.25 | | |
| 4 | | 2.00 | 2.76 | 3.55 | 2.90 | 5.0 | 5.55 | | | | |
| 5 | | 2.30 | 2.78 | | | 5.1 | 6.0 | 6.5 | | 4.1 | 3.2 |
| 6 | | 2.70 | 2.77 | 3.35 | 2.00 | 4.75 | 5.3 | | | | |
| 7 | | 2.72 | 2.81 | 3.12 | | 4.7 | 5.2 | | 6.15 | | |
| 8 | | 2.74 | 2.80 | 3.20 | | 4.6 | 5.2 | | | | |
| 9 | | 2.75 | 2.70 | 3.10 | 2.95 | 4.7 | 5.45 | | 6.0 | | 3.25 |
| 10 | | 2.86 | 2.72 | 3.30 | 2.90 | 4.45 | 5.4 | 6.75 | | | |
| 11 | | 2.90 | 2.56 | 3.15 | 2.90 | 4.3 | 5.55 | | 5.90 | | |
| 12 | | 2.80 | 2.40 | | | 4.15 | 5.6 | 7.30 | | 3.7 | |
| 13 | 2.00 | 2.70 | 2.28 | 3.00 | 2.90 | 4.65 | 5.55 | | 5.90 | | |
| 14 | 2.02 | 2.51 | 2.70 | 2.65 | 2.90 | 4.0 | 5.5 | | | | |
| 15 | 2.00 | 2.30 | | 3.00 | 3.00 | 3.95 | 5.2 | 7.1 | | 3.5 | |
| 16 | 2.58 | 2.45 | | 2.90 | 3.05 | 4.0 | 5.0 | | 5.9 | | |
| 17 | 2.38 | 2.51 | 2.88 | 2.80 | 3.20 | 4.1 | 4.95 | 7.7 | 6.6 | 3.36 | |
| 18 | 2.61 | 2.67 | 3.02 | | 3.30 | 4.28 | 4.95 | 7.15 | 6.5 | | |
| 19 | 2.30 | 2.00 | 2.84 | 3.00 | | 4.7 | 5.3 | | 5.6 | | |
| 20 | 2.42 | 2.82 | | 3.00 | 3.55 | 4.53 | 5.5 | 7.02 | 5.6 | | 3.0 |
| 21 | 2.00 | 2.51 | 3.30 | 2.70 | 3.53 | 4.55 | 5.95 | | | 3.45 | |
| 22 | 2.00 | 2.56 | | 2.95 | 3.75 | 5.0 | 6.0 | | 5.4 | | 3.65 |
| 23 | 2.61 | 2.00 | 2.90 | 3.00 | 3.95 | 5.01 | 6.42 | 6.4 | | | |
| 24 | 2.67 | 2.64 | 3.38 | 2.95 | 4.05 | 5.4 | 6.55 | | 5.1 | | |
| 25 | 2.02 | | 3.05 | 2.98 | 4.05 | 5.6 | 6.0 | | | | |
| 26 | 2.40 | 2.67 | 2.90 | 2.90 | 4.30 | 5.95 | 5.9 | 6.0 | 4.6 | | |
| 27 | 2.55 | 2.00 | 2.90 | | 4.40 | 5.55 | 5.5 | 6.2 | | 3.3 | |
| 28 | 2.53 | 2.40 | | 3.05 | 4.15 | 5.2 | | | 4.95 | 3.25 | |
| 29 | 2.55 | 2.40 | 2.90 | | 4.35 | 5.0 | 5.9 | | | | |
| 30 | 2.50 | 2.30 | 5.50 | | | 5.0 | | 6.35 | 4.5 | | 3.65 |
| 31 | | 2.30 | 5.30 | | 4.90 | | 5.55 | | | 3.3 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | June. |
|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | |
| 1 | | | | | 2.75 | 2.8 | 2.91 | |
| 2 | | | | 3.4 | 2.7 | | 3.0 | |
| 3 | | | | 3.7 | 2.75 | | 3.0 | |
| 4 | 3.1 | 2.9 | | 3.6 | | 2.8 | | |
| 5 | | | | | 2.8 | | | |
| 6 | | | | 3.6 | 2.8 | | 3.0 | |
| 7 | 3.17 | 2.87 | | | 2.8 | 2.9 | | |
| 8 | | | | 3.3 | 2.85 | | | |
| 9 | | | | 3.5 | 2.8 | | | |
| 10 | | 2.8 | | 3.6 | 2.8 | | | |
| 11 | 3.2 | 2.4 | | 3.3 | 2.9 | 2.9 | 2.9 | |
| 12 | | | | 3.3 | 2.75 | | 3.0 | |
| 13 | | | | 3.25 | 2.8 | 2.8 | | 4.9 |
| 14 | | | 2.4 | | 2.8 | | | |
| 15 | | | | 3.15 | 2.7 | 2.7 | | |
| 16 | | | | 3.15 | 2.73 | 2.8 | | |
| 17 | | | | 2.9 | 2.8 | | | 4.5 |
| 18 | 2.9 | 2.8 | | 2.9 | | 2.9 | | |
| 19 | | | | 2.9 | 2.82 | 2.8 | | 4.7 |
| 20 | | | | 2.84 | | 2.82 | | |
| 21 | 2.9 | 2.85 | | | 2.82 | 2.75 | | |
| 22 | | | | 2.8 | | 2.6 | | 3.9 |
| 23 | | | 2.65 | 2.8 | | | | |
| 24 | | | | 2.8 | | | | |
| 25 | | 2.75 | | 2.75 | | | | 4.0 |
| 26 | | | | 2.8 | | 2.9 | | |
| 27 | | | | 2.75 | 2.85 | 2.85 | | |
| 28 | | | | | | 2.85 | | |
| 29 | | | | 2.95 | 2.75 | | | |
| 30 | 2.9 | | | 2.7 | | | | |
| 31 | | | 2.75 | 2.75 | | | | |

*Daily discharge, in second-feet, of East Fork of Carson River near Markleeville, Cal., for 1910–11.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | |
| 1 | | 54 | 32 | 429 | 120 | 641 | 782 | 829 | 1,430 | 378 | 126 |
| 2 | | 58 | 72 | 302 | 112 | 712 | 720 | 1,420 | 1,390 | 358 | 122 |
| 3 | | 153 | 80 | 306 | 103 | 784 | 852 | 1,420 | 1,340 | 341 | 120 |
| 4 | | 60 | 81 | 231 | 103 | 680 | 924 | 1,420 | 1,320 | 324 | 127 |
| 5 | | 48 | 84 | 210 | 103 | 720 | 1,140 | 1,420 | 1,290 | 304 | 124 |
| 6 | | 73 | 76 | 189 | 103 | 584 | 906 | 1,480 | 1,260 | 292 | 123 |
| 7 | | 76 | 89 | 142 | 100 | 566 | 782 | 1,400 | 1,240 | 278 | 122 |
| 8 | | 79 | 87 | 157 | 98 | 530 | 782 | 1,460 | 1,220 | 264 | 121 |
| 9 | | 80 | 73 | 138 | 95 | 566 | 876 | 1,530 | 1,190 | 252 | 121 |
| 10 | | 97 | 76 | 177 | 103 | 478 | 852 | 1,590 | 1,180 | 240 | 118 |
| 11 | | 103 | 55 | 148 | 103 | 429 | 924 | 1,810 | 1,160 | 227 | 116 |
| 12 | | 87 | 39 | 134 | 103 | 383 | 948 | 2,030 | 1,150 | 214 | 114 |
| 13 | 60 | 73 | 37 | 120 | 103 | 354 | 924 | 1,900 | 1,140 | 201 | 112 |
| 14 | 63 | 49 | 73 | 95 | 103 | 340 | 900 | 1,690 | 1,120 | 188 | 109 |
| 15 | 60 | 48 | 82 | 120 | 120 | 327 | 782 | 1,780 | 1,090 | 175 | 106 |
| 16 | 58 | 43 | 91 | 103 | 134 | 340 | 690 | 1,960 | 1,070 | 182 | 104 |
| 17 | 58 | 49 | 100 | 87 | 157 | 368 | 660 | 2,150 | 1,440 | 190 | 102 |
| 18 | 61 | 45 | 124 | 104 | 220 | 423 | 660 | 1,790 | 1,370 | 184 | 100 |
| 19 | 32 | 60 | 93 | 120 | 226 | 566 | 806 | 1,820 | 900 | 178 | 98 |
| 20 | 40 | 90 | 135 | 120 | 231 | 506 | 900 | 1,840 | 890 | 172 | 95 |
| 21 | 60 | 49 | 177 | 73 | 227 | 512 | 1,120 | 1,750 | 838 | 166 | 98 |
| 22 | 60 | 55 | 132 | 95 | 277 | 690 | 1,140 | 1,670 | 765 | 162 | 102 |
| 23 | 61 | 60 | 87 | 120 | 327 | 684 | 1,380 | 1,590 | 712 | 158 | 102 |
| 24 | 69 | 65 | 194 | 112 | 354 | 852 | 1,450 | 1,490 | 640 | 153 | 102 |
| 25 | 63 | 55 | 134 | 117 | 362 | 948 | 1,140 | 1,400 | 545 | 149 | 102 |
| 26 | 38 | 45 | 103 | 87 | 309 | 1,120 | 1,100 | 1,310 | 450 | 144 | 102 |
| 27 | 54 | 60 | 103 | 108 | 340 | 924 | 1,040 | 1,430 | 485 | 140 | 102 |
| 28 | 52 | 38 | 103 | 129 | 383 | 762 | 1,070 | 1,480 | 520 | 148 | 102 |
| 29 | 54 | 38 | 103 | | 445 | 690 | 1,100 | 1,540 | 465 | 145 | 102 |
| 30 | 48 | 32 | 900 | | 524 | 680 | 1,010 | 1,480 | 410 | 142 | 102 |
| 31 | | 32 | 808 | | 603 | | 924 | | 393 | 140 | |

| Day. | Oct. | Nov. | Day. | Oct. | Nov. | Day. | Oct. | Nov. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | 104 | 70 | 11 | 124 | 26 | 21 | 71 | |
| 2 | 106 | 70 | 12 | 116 | | 22 | 71 | |
| 3 | 108 | 68 | 13 | 109 | | 23 | 71 | |
| 4 | 109 | 68 | 14 | 102 | | 24 | 71 | |
| 5 | 112 | 72 | 15 | 94 | | 25 | 71 | |
| 6 | 116 | 75 | 16 | 87 | | 26 | 71 | |
| 7 | 120 | 77 | 17 | 79 | | 27 | 71 | |
| 8 | 121 | 75 | 18 | 71 | | 28 | 71 | |
| 9 | 122 | 72 | 19 | 71 | | 29 | 71 | |
| 10 | 123 | 68 | 20 | 71 | | 30 | 71 | |
| | | | | | | 31 | 71 | |

NOTE.—Daily discharge determined from rating curves applicable as follows: Nov. 13, 1910, to June 16, 1911, fairly well defined; June 17 to July 28, 1911, indirect method for shifting channels used. July 29 to Dec. 31, 1911, fairly well defined. Discharge estimated or interpolated for days on which gage height was not recorded. Discharge estimated at 26 second-feet Nov. 12 to Dec. 31, 1911, on account of ice. Ice at the station Jan. 2–20, 1912. Discharge for 1912 withheld awaiting development of a rating curve.

*Monthly discharge of East Fork of Carson River near Markleeville, [illegible], for [illegible]*

| Month. | Discharge in second-feet. | | | Run-off in acre-feet. | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1910–11.** | | | | | |
| November 12–30 | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| December | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| January | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| February | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| March | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| July | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The period | | | | [illegible] | |
| **1911.** | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| November | | | [illegible] | [illegible] | |
| December | | | [illegible] | [illegible] | [illegible] |

EAST FORK OF CARSON RIVER NEAR GARDNERVILLE, NEV.

This station, which was located at a place called Horseshoe Bend, in the NW. ¼ sec. 13, T. 11 N., R. 20 E., about 9 miles south of Gardnerville, Nev., was established October 17, 1908, at Rodenbah's ranch, about 5 miles southeast of Gardnerville, removed to Horseshoe Bend (3 miles above the old station) on March 27, 1909, and was abandoned December 26, 1910. It was below all tributaries and above all diversion ditches.

The relation between gage height and discharge was not materially affected by ice.

The section is permanent, conditions are favorable, and results are good.

Discharge measurements made by the Stone & Webster Engineering Corporation have been furnished to the United States Geological Survey for publication.

Several gages at different datums were used.

Discharge measurements were made from a cable and car.

This station is maintained in cooperation with the United States Reclamation Service.

*Discharge measurements of East Fork of Carson River near Gardnerville, Nev., in 1901–1910.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1901. | | *Feet.* | *Sec.-ft.* |
| Mar. 10 | L. H. Taylor | 4.00 | 459 |
| Apr. 30 | do | 4.55 | a 664 |
| June 4 | do | 5.85 | 1,968 |
| 9 | do | 5.40 | 1,356 |
| Sept. 29 | do | 3.70 | a 127 |
| Nov. 7 | do | 3.70 | a 117 |
| Dec. 19 | do | 3.40 | 156 |
| 1902. | | | |
| Apr. 21 | D. W. Hays | 4.50 | 514 |
| May 13 | C. V. Taylor | 5.12 | 1,138 |
| July 2 | D. W. Hays | 4.25 | 496 |
| 19 | do | 3.90 | 192 |
| 29 | do | 3.70 | 139 |
| Aug. 5 | C. V. Taylor | 3.50 | 100 |
| Sept. 9 | L. L. Richards | 3.00 | 60 |
| Oct. 3 | E. C. Murphy | 3.20 | 66 |
| 1903. | | | |
| Apr. 9 | D. W. Hays | 4.25 | 398 |
| 22 | A. H. Schadler | 4.45 | 484 |
| May 2 | do | 5.12 | 1,024 |
| 13 | do | 6.15 | 1,999 |
| June 29 | do | 5.00 | 925 |
| July 15 | do | 4.05 | 380 |
| Aug. 4 | W. B. Harrington | 3.55 | 146 |
| 10 | do | 3.40 | 120 |
| 19 | do | 3.60 | 80 |
| Sept. 30 | W. A. Wolf | 3.20 | 82 |
| 1904. | | | |
| Mar. 12 | L. A. Woolley | 4.08 | 453 |
| May 3 | R. A. Craig | 4.22 | 546 |
| 12 | do | 6.15 | 2,071 |
| July 4 | J. T. Shaw | 5.01 | 1,023 |
| 14 | do | 4.50 | 613 |
| 19 | do | 4.59 | 697 |
| 28 | do | 4.30 | 477 |
| Aug. 2[b] | do | 4.46 | 495 |
| 11[b] | do | 4.03 | 279 |
| 18[b] | do | 4.04 | 252 |
| 25[b] | do | 4.16 | 207 |
| Sept. 7[b] | do | 3.50 | 119 |
| 22[b] | do | 4.05 | 147 |
| Oct. 15 | do | 4.20 | 366 |
| 1905. | | | |
| Apr. 2 | W. A. Wolf | 3.90 | 206 |
| 21 | do | 4.15 | 389 |
| May 2 | J. L. Brambila | 4.65 | 767 |

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1905. | | *Feet.* | *Sec.-ft.* |
| May 11 | J. L. Brambila | 4.15 | [illegible] |
| 16 | do | 5.00 | [illegible] |
| 25 | do | 5.22 | [illegible] |
| 30 | do | 4.85 | [illegible] |
| June 7 | do | 4.90 | [illegible] |
| 13 | do | 5.22 | [illegible] |
| 21 | do | 4.85 | [illegible] |
| 28 | do | 4.25 | [illegible] |
| July 9 | do | 4.00 | [illegible] |
| 24 | do | 3.90 | [illegible] |
| 30 | do | 3.80 | [illegible] |
| Aug. 7 | W. A. Wolf | 3.65 | [illegible] |
| 9 | do | 3.93 | [illegible] |
| 31 | do | 3.20 | [illegible] |
| Nov. 2 | John Smith | 2.10 | [illegible] |
| 4 | do | 2.10 | [illegible] |
| 1906. | | | |
| May 10 | M. B. Kennedy | c 5.60 | [illegible] |
| 17 | do | c 4.75 | [illegible] |
| June 6 | do | c 4.60 | [illegible] |
| 15 | do | d 6.45 | [illegible] |
| July 18 | do | d 5.65 | [illegible] |
| Aug. 17 | do | d 4.05 | [illegible] |
| Sept. 6 | C. L. Smith | d 3.90 | [illegible] |
| 1908. | | | |
| Mar. 27 | E. A. Porter | 2.90 | [illegible] |
| Apr. 16 | do | 3.50 | [illegible] |
| May 15 | do | 3.28 | [illegible] |
| June 21 | do | 3.50 | [illegible] |
| July 24 | do | 2.53 | [illegible] |
| Aug. 4 | M. B. Kennedy | 2.50 | [illegible] |
| 1909. | | | |
| Jan. 25 | E. A. Porter | 3.25 | [illegible] |
| June 15 | L. J. Towne | 5.25 | [illegible] |
| July 7 | do | 3.95 | [illegible] |
| Aug. 9 | do | 2.73 | [illegible] |
| 1910. | | | |
| Mar. 29 | F. C. Shafer | 3.20 | [illegible] |
| Apr. 28 | Stone & Webster Engineering Corporation. | 4.93 | [illegible] |
| June 2 | do | 3.92 | [illegible] |
| 21 | do | 3.31 | [illegible] |
| July 19 | do | 3.10 | [illegible] |
| 26 | do | 2.71 | [illegible] |
| Sept. 28 | do | 2.50 | [illegible] |
| Dec. 12 | D. S. Stuver | 2.68 | [illegible] |

[a] Approximate.
[b] Temporary dam in stream below station affected measurements.
[c] At new gage established Oct. 8, 1905.
[d] At old gage used prior to Oct. 8, 1905.

*Daily gage height, in feet, of East Fork of Carson River near Gardnerville, Nev., for 1900–1906.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901. | | | | | | | | | | | | |
| 1 | | 2.4 | 2.4 | 2.4 | 2.0 | 4.7 | 3.8 | 4.6 | 5.7 | 5.5 | 3.7 | 3.4 |
| 2 | | 2.4 | 2.4 | 2.4 | 2.1 | 4.7 | 3.7 | 4.6 | 5.8 | 5.4 | 3.7 | 3.5 |
| 3 | | 2.4 | 2.4 | 2.4 | 2.1 | 4.7 | 3.7 | 4.7 | 6.1 | 5.3 | 4.1 | 3.5 |
| 4 | | 2.3 | 2.4 | 2.5 | 2.1 | 4.6 | 3.7 | 4.7 | 5.9 | 5.3 | 4.1 | 3.5 |
| 5 | | 2.3 | 2.4 | 2.8 | 2.1 | 4.6 | 3.6 | 4.7 | 5.8 | 5.1 | 4.2 | 3.5 |
| 6 | | 2.3 | 2.4 | 3.0 | 2.0 | 4.5 | 3.6 | 4.9 | 5.8 | 5.0 | 4.3 | 3.6 |
| 7 | | 2.3 | 2.3 | 2.9 | 2.0 | 4.4 | 3.7 | 5.1 | 5.7 | 4.9 | 4.4 | 3.8 |
| 8 | | 2.6 | 2.3 | 2.8 | 2.0 | 4.4 | 3.8 | 5.4 | 5.6 | 4.8 | 4.3 | 3.8 |
| 9 | | 2.5 | 2.3 | 2.6 | 1.9 | 4.2 | 3.8 | 5.7 | 5.6 | 4.7 | 4.2 | 3.8 |
| 10 | | 2.5 | 2.3 | 2.5 | 1.9 | 4.0 | 3.8 | 5.9 | 5.5 | 4.6 | 4.1 | 3.9 |

*Daily gage height, in feet, of East Fork of Carson River near Gardnerville, Nev., for 1900–1906*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1900–1901.** | | | | | | | | | | | | |
| 11 | ...... | 2.4 | 2.3 | 2.5 | 1.9 | 4.0 | 3.9 | 6.7 | 5.4 | 4.5 | 3.9 | 3.9 |
| 12 | ...... | 2.4 | 2.3 | 2.5 | 2.0 | 3.9 | 4.1 | 7.0 | 5.2 | 4.4 | 3.9 | 3.8 |
| 13 | ...... | 2.4 | 2.4 | 2.5 | 2.0 | 3.7 | 4.2 | 7.1 | 5.0 | 4.3 | 3.8 | 3.8 |
| 14 | ...... | 2.4 | 2.4 | 2.4 | 2.0 | 3.6 | 4.3 | 7.2 | 5.0 | 4.2 | 3.7 | 3.7 |
| 15 | ...... | 2.4 | 2.4 | 2.4 | 2.6 | 3.6 | 4.4 | 7.3 | 5.1 | 4.1 | 3.5 | 3.7 |
| 16 | ...... | 2.3 | 2.4 | 2.3 | 5.5 | 3.8 | 4.4 | 7.3 | 5.1 | 4.1 | 3.5 | 3.7 |
| 17 | 2.3 | 2.4 | 2.4 | 2.3 | 6.4 | 4.0 | 4.4 | 7.4 | 5.3 | 4.0 | 3.6 | 3.7 |
| 18 | 2.3 | 2.4 | 2.4 | 2.3 | 6.0 | 4.0 | 4.4 | 7.2 | 5.3 | 4.1 | 4.5 | 3.6 |
| 19 | 2.3 | 2.5 | 2.4 | 2.4 | 6.0 | 3.9 | 4.6 | 7.1 | 5.4 | 4.1 | 4.3 | 3.5 |
| 20 | 2.5 | 2.5 | 2.4 | 1.9 | 5.7 | 3.9 | 4.7 | 5.9 | 5.5 | 4.2 | 4.3 | 3.5 |
| 21 | 2.6 | 2.9 | 2.4 | 2.0 | 5.5 | 3.8 | 4.6 | 5.8 | 5.5 | 4.2 | 4.1 | 3.4 |
| 22 | 2.6 | 2.9 | 2.4 | 2.0 | 5.0 | 3.9 | 4.6 | 5.7 | 5.4 | 4.2 | 3.9 | 3.4 |
| 23 | 2.6 | 2.7 | 2.4 | 2.0 | 5.0 | 3.8 | 4.5 | 5.6 | 5.3 | 4.6 | 3.8 | 3.4 |
| 24 | 2.5 | 2.7 | 2.4 | 2.0 | 5.0 | 3.8 | 4.5 | 5.5 | 5.3 | 4.3 | 3.7 | 3.4 |
| 25 | 2.5 | 2.7 | 2.4 | 2.0 | 4.9 | 3.8 | 4.5 | 5.3 | 5.2 | 4.1 | 3.5 | 3.8 |
| 26 | 2.5 | 2.6 | 2.4 | 2.1 | 4.9 | 3.8 | 4.5 | 5.3 | 5.3 | 4.0 | 3.5 | 3.8 |
| 27 | 2.4 | 2.4 | 2.4 | 2.1 | 4.8 | 3.7 | 4.5 | 5.3 | 5.4 | 4.0 | 3.4 | 3.7 |
| 28 | 2.4 | 2.4 | 2.4 | 2.1 | 4.7 | 3.6 | 4.5 | 5.4 | 5.5 | 3.9 | 3.4 | 3.7 |
| 29 | 2.3 | 2.4 | 2.4 | 2.1 | ...... | 3.6 | 4.5 | 5.4 | 5.6 | 3.9 | 3.4 | 3.7 |
| 30 | 2.4 | 2.4 | 2.4 | 2.0 | ...... | 3.7 | 4.5 | 5.5 | 5.7 | 3.8 | 3.4 | 3.7 |
| 31 | 2.4 | ...... | 2.4 | 1.9 | ...... | 3.8 | ...... | 5.6 | ...... | 3.7 | 3.6 | ...... |
| **1901–2.** | | | | | | | | | | | | |
| 1 | 3.9 | 4.0 | 3.8 | 3.3 | 3.1 | 3.1 | 3.8 | 4.4 | 4.9 | 3.8 | 3.5 | 3.35 |
| 2 | 3.9 | 4.0 | 3.8 | 3.3 | 3.1 | 3.2 | 3.8 | 4.4 | 5.0 | 4.0 | 3.6 | 3.3 |
| 3 | 3.8 | 4.0 | 3.8 | 3.3 | 3.2 | 3.1 | 3.8 | 4.5 | 5.2 | 3.9 | 3.4 | 3.1 |
| 4 | 3.7 | 4.1 | 5.1 | 3.3 | 3.2 | 3.2 | 3.8 | 4.5 | 5.3 | 3.9 | 3.25 | 3.1 |
| 5 | 3.7 | 4.1 | 4.7 | 3.3 | 3.2 | 3.1 | 3.9 | 4.6 | 5.4 | 3.9 | 3.4 | 3.05 |
| 6 | 3.7 | 4.1 | 4.3 | 3.4 | 3.2 | 3.1 | 3.9 | 4.8 | 5.5 | 4.0 | 3.5 | 3.0 |
| 7 | 3.6 | 3.9 | 4.1 | 3.3 | 3.1 | 3.2 | 4.9 | 5.0 | 5.7 | 3.8 | 3.4 | 3.1 |
| 8 | 3.6 | 3.7 | 3.8 | 3.4 | 3.2 | 3.2 | 4.8 | 5.2 | 6.0 | 3.7 | 3.6 | 3.15 |
| 9 | 3.5 | 3.7 | 3.8 | 3.4 | 3.4 | 3.4 | 4.7 | 5.5 | 5.4 | 3.8 | 3.7 | 3.05 |
| 10 | 3.5 | 4.0 | 3.8 | 3.3 | 3.3 | 3.4 | 4.4 | 5.8 | 5.3 | 3.9 | 3.95 | 3.2 |
| 11 | 3.5 | 3.9 | 3.7 | 3.6 | 3.2 | 3.4 | 4.3 | 5.2 | 5.3 | 3.8 | 3.75 | 3.1 |
| 12 | 3.5 | 3.9 | 3.7 | 3.5 | 3.3 | 3.4 | 4.4 | 5.4 | 5.4 | 3.9 | 3.8 | 3.05 |
| 13 | 3.5 | 3.8 | 3.7 | 3.5 | 3.3 | 3.4 | 4.4 | 5.5 | 5.5 | 3.8 | 3.9 | 3.0 |
| 14 | 3.5 | 3.7 | 3.7 | 3.5 | 3.3 | 3.4 | 4.5 | 5.5 | 5.4 | 3.8 | 3.85 | 3.2 |
| 15 | 3.5 | 3.7 | 3.7 | 3.4 | 3.5 | 3.5 | 4.6 | 5.4 | 5.5 | 3.7 | 3.7 | 3.15 |
| 16 | 3.5 | 3.7 | 3.7 | 3.5 | 3.7 | 3.6 | 4.6 | 5.4 | 5.0 | 3.8 | 3.7 | 3.15 |
| 17 | 3.5 | 3.6 | 3.6 | 3.5 | 3.6 | 3.6 | 4.8 | 5.5 | 4.6 | 3.9 | 3.75 | 3.2 |
| 18 | 3.5 | 3.6 | 3.4 | 3.5 | 3.5 | 3.6 | 4.9 | 4.9 | 4.7 | 3.8 | 3.65 | 3.0 |
| 19 | 3.5 | 3.7 | 3.4 | 3.4 | 3.5 | 3.6 | 4.7 | 5.0 | 4.8 | 3.8 | 3.7 | 2.9 |
| 20 | 3.5 | 3.7 | 3.4 | 3.5 | 3.5 | 3.6 | 4.7 | 5.2 | 4.5 | 3.8 | 3.7 | 2.9 |
| 21 | 3.5 | 3.7 | 3.4 | 3.4 | 3.4 | 3.7 | 4.5 | 5.2 | 4.6 | 3.7 | 3.8 | 2.85 |
| 22 | 3.5 | 3.7 | 3.4 | 3.5 | 3.4 | 3.7 | 4.3 | 5.3 | 4.7 | 3.7 | 3.8 | 2.8 |
| 23 | 3.5 | 3.7 | 3.3 | 3.5 | 3.3 | 3.7 | 4.5 | 5.6 | 4.3 | 3.8 | 3.65 | 2.8 |
| 24 | 3.5 | 3.7 | 3.4 | 3.4 | 3.3 | 3.6 | 4.3 | 5.3 | 4.2 | 3.7 | 3.65 | 2.75 |
| 25 | 3.6 | 3.6 | 3.4 | 3.1 | 3.3 | 3.5 | 4.6 | 5.5 | 4.2 | 3.6 | 3.5 | 2.8 |
| 26 | 3.6 | 3.6 | 3.3 | 2.9 | 3.3 | 3.5 | 4.5 | 5.4 | 4.1 | 3.7 | 3.5 | 2.85 |
| 27 | 3.7 | 3.7 | 3.4 | 3.0 | 3.2 | 3.6 | 4.5 | 5.3 | 4.0 | 3.6 | 3.45 | 2.9 |
| 28 | 3.7 | 3.7 | 3.4 | 3.1 | 3.1 | 3.6 | 4.3 | 6.0 | 4.0 | 3.5 | 3.5 | 3.05 |
| 29 | 3.9 | 4.1 | 3.3 | 3.2 | ...... | 3.7 | 4.4 | 5.5 | 3.9 | 3.7 | 3.45 | 3.0 |
| 30 | 4.0 | 3.9 | 3.4 | 3.2 | ...... | 3.8 | 4.3 | 5.4 | 3.8 | 3.6 | 3.45 | 3.0 |
| 31 | 4.0 | ...... | 3.3 | 3.2 | ...... | 3.8 | ...... | 5.2 | ...... | 3.6 | 3.4 | ...... |
| **1902–3.** | | | | | | | | | | | | |
| 1 | 3.05 | 2.95 | 3.40 | 2.50 | 2.65 | 2.70 | 4.35 | 5.80 | 6.65 | 4.90 | 3.45 | 3.52 |
| 2 | 2.95 | 3.00 | 3.35 | 2.45 | 2.60 | 2.75 | 4.40 | 5.90 | 6.75 | 4.75 | 3.55 | 3.52 |
| 3 | 3.15 | 2.90 | 3.30 | 2.50 | 2.50 | 2.80 | 4.50 | 5.90 | 6.50 | 4.75 | 3.65 | 3.42 |
| 4 | 3.10 | 2.90 | 3.40 | 2.55 | 2.50 | 2.75 | 4.55 | 5.85 | 5.85 | 4.65 | 3.55 | 3.42 |
| 5 | 3.05 | 3.00 | 3.30 | 2.55 | 2.55 | 2.75 | 4.65 | 5.80 | 6.10 | 4.55 | 3.45 | 3.38 |
| 6 | 2.95 | 3.00 | 3.30 | 2.60 | 2.50 | 2.80 | 4.75 | 5.85 | 6.45 | 4.50 | 3.50 | 3.25 |
| 7 | 3.10 | 2.90 | 3.35 | 2.60 | 2.60 | 2.80 | 4.85 | 5.95 | 6.45 | 4.45 | 3.45 | 3.15 |
| 8 | 3.05 | 2.90 | 3.30 | 2.60 | 2.50 | 2.85 | 4.85 | 6.00 | 6.35 | 4.40 | 3.45 | 3.05 |
| 9 | 3.00 | 3.55 | 3.30 | 2.50 | 2.50 | 2.90 | 4.95 | 6.10 | 6.25 | 4.45 | 3.45 | 3.00 |
| 10 | 3.10 | 4.00 | 3.35 | 2.55 | 2.40 | 2.90 | 4 95 | 6.35 | 6.15 | 4.45 | 3.40 | 3.00 |
| 11 | 3.10 | 3.75 | 3.25 | 2.40 | 2.40 | 2.95 | 4.85 | 6.45 | 6.25 | 4.35 | 3.35 | 3.00 |
| 12 | 3.00 | 3.70 | 3.30 | 2.45 | 2.20 | 2.95 | 4.70 | 6.70 | 6.15 | 4.30 | 3.45 | 3.00 |
| 13 | 3.10 | 3.55 | 3.25 | 2.45 | 2.20 | 2.95 | 4.70 | 6.95 | 6.05 | 4.28 | 3.48 | 3.05 |
| 14 | 2.95 | 3.50 | 2.90 | 2.40 | 2.25 | 3.00 | 4.75 | 7.05 | 5.70 | 4.05 | 3.35 | 3.05 |
| 15 | 2.90 | 3.45 | 2.90 | 2.40 | 2.35 | 3.15 | 4.75 | 6.95 | 5.35 | 4.00 | 3.30 | 3.05 |

*Daily gage height, in feet, of East Fork of Carson River, near Gardnerville, Nev., for 1900–1906—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1902-3.** | | | | | | | | | | | | |
| 16 | 2.95 | 3.40 | 2.80 | 2.40 | 2.40 | 3.20 | 4.70 | 6.85 | 5.20 | 3.90 | 3.35 | 3.00 |
| 17 | 3.00 | 3.25 | 2.90 | 2.40 | 2.40 | 3.35 | 4.65 | 6.75 | 5.20 | 3.90 | 3.80 | 3.00 |
| 18 | 2.90 | 3.35 | 2.90 | 2.40 | 2.35 | 3.40 | 4.75 | 6.35 | 5.25 | 3.85 | 3.65 | 3.00 |
| 19 | 2.90 | 3.40 | 2.85 | 2.40 | 2.35 | 3.45 | 4.75 | 6.10 | 5.35 | 3.90 | 3.45 | 3.00 |
| 20 | 2.95 | 3.35 | 2.90 | 2.40 | 2.40 | 3.5 | 4.95 | 5.95 | 5.45 | 3.90 | 3.35 | 2.95 |
| 21 | 3.00 | 3.30 | 2.75 | 2.30 | 2.30 | 3.55 | 4.95 | 5.70 | 5.75 | 3.90 | 3.80 | 2.90 |
| 22 | 3.20 | 3.30 | 2.70 | 2.40 | 2.40 | 3.60 | 5.05 | 5.25 | 5.95 | 3.90 | 3.95 | 2.90 |
| 23 | 3.05 | 3.40 | 2.65 | 2.40 | 2.40 | 3.70 | 5.15 | 4.90 | 6.00 | 3.90 | 3.65 | 2.90 |
| 24 | 3.05 | 3.35 | 2.60 | 2.30 | 2.45 | 3.90 | 5.25 | 4.30 | 5.90 | 3.90 | 3.65 | 2.85 |
| 25 | 2.95 | 3.40 | 2.60 | 2.45 | 2.45 | 3.75 | 5.35 | 4.60 | 5.75 | 3.70 | 3.65 | 2.95 |
| 26 | 2.90 | 3.40 | 2.50 | 2.45 | 2.50 | 3.65 | 5.45 | 4.65 | 5.65 | 3.60 | 3.65 | 2.85 |
| 27 | 2.90 | 3.25 | 2.60 | 2.50 | 2.55 | 3.95 | 5.55 | 4.90 | 5.50 | 3.55 | 3.72 | 2.85 |
| 28 | 2.85 | 3.35 | 2.50 | 2.55 | 2.60 | 4.05 | 5.60 | 5.20 | 5.45 | 3.50 | 3.66 | 2.90 |
| 29 | 2.90 | 3.35 | 2.50 | 2.60 | ...... | 4.15 | 5.65 | 5.90 | 5.15 | 3.45 | 3.62 | 2.90 |
| 30 | 3.00 | 3.40 | 2.50 | 2.60 | ...... | 4.25 | 5.75 | 6.20 | 4.95 | 3.50 | 3.62 | 2.90 |
| 31 | 2.95 | ...... | 2.45 | 2.50 | ...... | 4.30 | ...... | 6.50 | ...... | 3.42 | 3.60 | ...... |
| **1903-4.** | | | | | | | | | | | | |
| 1 | 2.90 | 3.20 | 3.40 | 2.40 | 2.90 | 4.50 | 4.22 | 4.28 | 6.20 | 4.20 | 4.34 | 3.10 |
| 2 | 2.90 | 3.20 | 3.40 | 2.40 | 2.90 | 4.65 | 4.20 | 4.24 | 6.24 | 4.18 | 4.74 | 3.00 |
| 3 | 2.90 | 3.20 | 3.35 | 2.40 | 2.98 | 4.75 | 4.25 | 4.24 | 6.35 | 4.32 | 4.74 | 2.98 |
| 4 | 2.90 | 3.25 | 3.35 | 2.45 | 3.00 | 4.75 | 4.35 | 4.28 | 6.42 | 5.04 | 4.65 | 3.30 |
| 5 | 3.05 | 3.35 | 3.25 | 2.50 | 2.90 | 4.40 | 4.35 | 4.62 | 6.48 | 4.97 | 5.00 | 3.50 |
| 6 | 3.10 | 3.30 | 3.20 | 2.50 | 2.90 | 4.15 | 4.42 | 5.10 | 5.42 | 4.88 | 4.88 | 3.60 |
| 7 | 3.20 | 3.20 | 3.10 | 2.50 | 2.90 | 4.20 | 4.48 | 5.30 | 5.52 | 4.94 | 4.60 | 3.75 |
| 8 | 3.20 | 3.20 | 3.10 | 2.48 | 3.00 | 4.35 | 4.52 | 5.48 | 5.52 | 4.97 | 4.44 | 3.85 |
| 9 | 3.25 | 3.30 | 3.05 | 2.48 | 3.15 | 4.70 | 4.58 | 5.62 | 5.48 | 4.70 | 4.60 | 3.94 |
| 10 | 3.35 | 3.35 | 3.00 | 2.90 | 3.25 | 4.60 | 4.58 | 5.85 | 5.25 | 4.65 | 4.55 | 3.98 |
| 11 | 3.40 | 3.45 | 2.62 | 2.90 | 3.35 | 4.42 | 5.08 | 6.10 | 4.95 | 4.72 | 4.35 | 4.00 |
| 12 | 3.40 | 3.85 | 3.00 | 2.78 | 3.45 | 4.62 | 5.40 | 6.38 | 4.90 | 4.62 | 4.00 | 4.00 |
| 13 | 3.35 | 4.50 | 3.00 | 2.75 | 3.90 | 4.50 | 5.65 | 6.60 | 4.42 | 4.58 | 3.85 | 4.12 |
| 14 | 3.30 | 4.75 | 2.90 | 2.90 | 3.95 | 4.05 | 5.62 | 6.96 | 3.98 | 4.55 | 3.88 | 4.25 |
| 15 | 3.32 | 4.50 | 2.90 | 2.78 | 3.85 | 4.12 | 5.48 | 6.75 | 3.58 | 4.48 | 3.94 | 4.60 |
| 16 | 3.35 | 4.35 | 2.95 | 2.75 | 5.90 | 4.18 | 5.38 | 6.56 | 3.38 | 4.42 | 3.97 | 4.60 |
| 17 | 3.35 | 4.30 | 2.85 | 2.70 | 5.20 | 4.40 | 5.32 | 6.45 | 3.29 | 4.48 | 4.22 | 4.58 |
| 18 | 3.38 | 4.15 | 2.85 | 2.68 | 4.92 | 4.75 | 5.25 | 6.25 | 3.68 | 4.52 | 4.21 | 4.63 |
| 19 | 3.40 | 4.05 | 2.90 | 2.65 | 4.68 | 5.00 | 5.20 | 6.18 | 4.50 | 4.58 | 4.24 | 4.62 |
| 20 | 3.40 | 3.95 | 2.65 | 2.62 | 4.55 | 4.95 | 5.12 | 5.90 | 5.06 | 4.68 | 4.19 | 4.62 |
| 21 | 3.40 | 3.90 | 2.60 | 2.62 | 4.85 | 4.90 | 4.90 | 6.90 | 5.58 | 4.75 | 4.10 | 4.61 |
| 22 | 3.40 | 3.90 | 2.50 | 2.60 | 4.95 | 4.68 | 4.65 | 7.05 | 5.65 | 4.85 | 4.00 | 4.60 |
| 23 | 3.40 | 3.85 | 2.50 | 2.60 | 5.40 | 4.38 | 4.45 | 7.12 | 5.38 | 4.88 | 3.90 | 4.62 |
| 24 | 3.40 | 3.90 | 2.45 | 2.70 | 7.30 | 4.32 | 4.50 | 7.02 | 5.06 | 4.65 | 3.92 | 4.64 |
| 25 | 3.38 | 3.90 | 2.45 | 2.65 | 4.95 | 4.10 | 4.52 | 6.70 | 4.40 | 4.48 | 3.83 | 4.60 |
| 26 | 3.35 | 3.90 | 2.40 | 2.65 | 4.90 | 4.06 | 4.48 | 6.40 | 4.18 | 4.40 | 3.78 | 4.51 |
| 27 | 3.35 | 3.75 | 2.35 | 2.68 | 5.05 | 4.22 | 4.42 | 6.36 | 4.22 | 4.31 | 3.52 | 4.42 |
| 28 | 3.20 | 3.73 | 2.35 | 2.68 | 4.30 | 4.68 | 4.37 | 6.50 | 4.29 | 4.28 | 3.41 | 4.34 |
| 29 | 3.20 | 3.55 | 2.40 | 2.70 | 4.40 | 4.90 | 4.45 | 6.35 | 4.28 | 4.22 | 3.37 | 4.25 |
| 30 | 3.20 | 3.50 | 2.40 | 2.70 | ...... | 4.50 | 4.38 | 6.32 | 4.28 | 4.20 | 3.34 | 4.30 |
| 31 | 3.20 | ...... | 2.40 | 2.85 | ...... | 4.28 | ...... | 6.28 | ...... | 4.14 | 3.31 | ...... |
| **1904-5.** | | | | | | | | | | | | |
| 1 | 4.35 | 3.65 | 2.55 | 2.30 | 3.58 | 5.19 | 3.85 | 4.50 | 4.71 | 4.37 | 3.79 | 3.40 |
| 2 | 4.45 | 3.60 | 2.55 | 2.32 | 3.58 | 5.19 | 4.30 | 5.10 | 4.68 | 4.25 | 3.80 | 3.39 |
| 3 | 4.28 | 3.60 | 2.55 | 2.34 | 3.58 | 5.20 | 4.25 | 5.50 | 4.30 | 4.20 | 3.80 | 3.39 |
| 4 | 4.26 | 3.60 | 2.00 | 2.25 | 3.60 | 5.20 | 4.10 | 5.20 | 4.35 | 4.20 | 3.82 | 3.38 |
| 5 | 4.22 | 3.58 | 2.00 | 2.24 | 3.58 | 4.98 | 4.15 | 4.95 | 4.45 | 4.19 | 3.78 | 3.37 |
| 6 | 4.16 | 3.52 | 2.00 | 2.24 | 3.54 | 4.80 | 4.20 | 4.60 | 4.56 | 4.15 | 3.78 | 3.37 |
| 7 | 4.07 | 3.35 | 2.00 | 2.24 | 3.54 | 4.78 | 4.12 | 4.15 | 4.66 | 4.12 | 3.72 | 3.37 |
| 8 | 4.00 | 3.30 | 2.00 | 2.65 | 3.55 | 4.68 | 4.12 | 4.00 | 4.60 | 4.12 | 3.66 | 3.36 |
| 9 | 4.15 | 3.27 | 2.00 | 2.80 | 3.56 | 4.62 | 4.10 | 3.90 | 4.75 | 4.11 | 3.66 | 3.36 |
| 10 | 4.23 | 3.22 | 2.00 | 2.88 | 3.58 | 4.60 | 3.90 | 3.80 | 4.75 | 4.10 | 3.95 | 3.33 |
| 11 | 4.25 | 3.12 | 2.10 | 2.98 | 3.58 | 4.60 | 3.95 | 4.08 | 4.80 | 4.05 | 4.23 | 3.22 |
| 12 | 4.71 | 3.10 | 2.10 | 3.20 | 4.00 | 4.45 | 3.85 | 3.95 | 4.90 | 4.00 | ...... | 3.22 |
| 13 | 4.58 | 3.05 | 2.05 | 3.38 | 4.00 | 4.50 | 3.90 | 4.11 | 4.95 | 3.88 | 4.18 | 3.21 |
| 14 | 4.46 | 3.05 | 2.12 | 3.60 | 4.12 | 4.28 | 3.90 | 4.65 | 4.88 | 3.83 | 3.65 | 3.20 |
| 15 | 4.37 | 2.95 | 2.12 | 3.65 | 4.12 | 4.21 | 3.92 | 5.40 | 4.88 | 3.78 | 3.78 | 3.19 |
| 16 | 4.32 | 2.95 | 2.10 | 3.60 | 4.13 | 4.19 | 3.91 | 6.00 | 4.85 | 3.74 | 3.78 | 3.19 |
| 17 | 4.31 | 2.85 | 2.10 | 3.60 | 4.14 | 4.18 | 3.90 | 5.75 | 4.85 | 3.90 | 3.78 | 3.19 |
| 18 | 4.30 | 2.80 | 2.10 | 3.62 | 4.14 | 4.14 | 3.89 | 5.85 | 4.90 | 3.85 | 3.78 | 3.19 |
| 19 | 4.28 | 2.80 | 2.00 | 3.60 | 4.14 | 4.05 | 3.89 | 5.40 | 4.93 | 3.74 | 3.68 | 3.19 |
| 20 | 4.28 | 2.78 | 2.00 | 3.62 | 4.50 | 4.00 | 3.90 | 5.49 | 4.92 | 3.70 | 3.64 | 3.19 |

NOTE.—Beginning Aug. 1, 1904, the gage heights were affected by temporary dam below the station.

*Daily gage height, in feet, of East Fork of Carson River, near Gardnerville, Nev., for 1900–1906*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904-5. | | | | | | | | | | | | |
| 21 | 4.27 | 2.75 | 2.00 | 3.63 | 5.00 | 3.90 | 3.92 | 5.42 | 4.83 | 3.71 | 3.62 | 3.18 |
| 22 | 4.26 | 2.75 | 2.00 | 3.64 | 5.10 | 3.95 | 3.96 | 5.25 | 4.80 | 3.70 | 3.59 | 3.18 |
| 23 | 4.24 | 2.72 | 2.00 | 3.66 | 5.14 | 3.95 | 3.98 | 5.15 | 4.68 | 3.72 | 3.59 | 3.17 |
| 24 | 4.20 | 2.70 | 2.05 | 3.65 | 5.16 | 3.92 | 4.00 | 5.18 | 4.60 | 3.72 | 3.52 | 3.16 |
| 25 | 4.10 | 2.70 | 2.10 | 3.64 | 5.19 | 3.95 | 4.18 | 5.13 | 4.53 | 3.76 | 3.50 | 3.15 |
| 26 | 3.95 | 2.70 | 2.20 | 3.60 | 5.12 | 3.95 | 4.20 | 4.97 | 4.53 | 3.79 | 3.50 | 3.16 |
| 27 | 3.85 | 2.70 | 2.25 | 3.60 | 5.12 | 3.85 | 4.21 | 4.85 | 4.49 | 3.84 | 3.50 | 3.20 |
| 28 | 3.75 | 2.80 | 2.30 | 3.60 | 5.12 | 3.80 | 4.23 | 4.83 | 4.41 | 3.85 | 3.47 | 3.30 |
| 29 | 3.68 | 2.75 | 2.28 | 3.60 | ...... | 3.80 | 4.28 | 4.85 | 4.39 | 3.85 | 3.41 | 3.40 |
| 30 | 3.62 | 2.65 | 2.29 | 3.60 | ...... | 3.80 | 4.30 | 4.85 | 4.38 | 3.86 | 3.40 | 3.33 |
| 31 | 3.65 | ...... | 2.34 | 3.60 | ...... | 3.85 | ...... | 4.83 | ...... | 3.86 | 3.40 | ...... |
| 1905-6. | | | | | | | | | | | | |
| 1 | 3.33 | 3.30 | 3.10 | 1.98 | 2.75 | 2.72 | 3.10 | 4.20 | 4.60 | 5.40 | 4.00 | 2.75 |
| 2 | 3.33 | 3.25 | 3.10 | 1.98 | 2.72 | 2.72 | 3.10 | 4.40 | 4.70 | 5.80 | 3.90 | 2.75 |
| 3 | 3.32 | 3.20 | 3.10 | 1.98 | 2.72 | 2.71 | 3.20 | 4.70 | 4.70 | 5.50 | 3.80 | 2.75 |
| 4 | 3.33 | 3.20 | 3.05 | 1.98 | 2.72 | 2.71 | 3.25 | 5.00 | 4.70 | 5.30 | 3.70 | 2.75 |
| 5 | 3.40 | 3.30 | 3.04 | 1.98 | 2.72 | 2.70 | 3.28 | 5.10 | 4.75 | 5.20 | 3.65 | 2.70 |
| 6 | 3.40 | 3.25 | 3.04 | 1.98 | 2.72 | 2.70 | 3.30 | 5.90 | 4.80 | 5.00 | 3.60 | 2.70 |
| 7 | 3.40 | 3.20 | 3.04 | 1.99 | 2.72 | 2.70 | 3.30 | 5.80 | 4.80 | 5.00 | 3.50 | 2.70 |
| 8 | 3.30 | 3.20 | 3.04 | 2.00 | 2.72 | 2.70 | 3.30 | 5.80 | 4.80 | 4.80 | 3.50 | 2.70 |
| 9 | 3.30 | 3.20 | 3.03 | 2.00 | 2.72 | 2.71 | 3.40 | 5.80 | 4.90 | 4.60 | 3.45 | 2.60 |
| 10 | 3.30 | 3.20 | 3.04 | 2.05 | 2.72 | 2.73 | 3.45 | 6.00 | 5.00 | 4.60 | 3.45 | 2.60 |
| 11 | 3.32 | 3.20 | 3.06 | 2.05 | 2.74 | 2.73 | 3.46 | 6.00 | 5.00 | 4.50 | 3.44 | 2.60 |
| 12 | 3.30 | 3.20 | 3.06 | 2.05 | 2.74 | 2.74 | 3.47 | 5.90 | 5.40 | 4.80 | 3.44 | 2.60 |
| 13 | 3.30 | 3.15 | 3.05 | 2.05 | 2.74 | 2.75 | 3.48 | 5.80 | 5.50 | 5.10 | 3.43 | 2.60 |
| 14 | 3.30 | 3.15 | 3.06 | ...... | 2.73 | 2.75 | 3.49 | 5.60 | 5.80 | 4.70 | 3.43 | 2.59 |
| 15 | 3.30 | 3.15 | 3.07 | ...... | 2.73 | 2.74 | 4.00 | 5.50 | 5.90 | 4.60 | 3.43 | 2.59 |
| 16 | 3.32 | 3.15 | 3.09 | ...... | 2.73 | 2.74 | 4.00 | 5.50 | 5.90 | 4.60 | 3.42 | 2.58 |
| 17 | 3.30 | 3.15 | 3.10 | ...... | 2.74 | 2.72 | 4.10 | 5.40 | 6.00 | 4.50 | 3.15 | 2.58 |
| 18 | 3.30 | 3.15 | 3.10 | ...... | 2.74 | 2.75 | 4.20 | 5.40 | 6.10 | 4.50 | 3.15 | 2.58 |
| 19 | 3.30 | 3.10 | 3.10 | ...... | 2.74 | 2.75 | 4.20 | 5.30 | 6.40 | 4.40 | 3.00 | 2.58 |
| 20 | 3.30 | 3.10 | 3.12 | ...... | 2.74 | 2.77 | 4.40 | 4.80 | 6.40 | 4.40 | 3.00 | 2.56 |
| 21 | 3.30 | 3.10 | 3.12 | 2.82 | 2.74 | 2.77 | 4.50 | 4.80 | 6.00 | 4.37 | 2.90 | 2.56 |
| 22 | 3.30 | 3.10 | 3.12 | 2.80 | 2.73 | 2.79 | 4.60 | 4.60 | 6.20 | 4.35 | 2.90 | 2.56 |
| 23 | 3.20 | 3.10 | 3.13 | 2.70 | 2.73 | 2.80 | 4.40 | 4.60 | 6.10 | 4.35 | 2.90 | 2.54 |
| 24 | 3.20 | 3.10 | 3.13 | 2.70 | 2.74 | 2.81 | 4.30 | 4.40 | 5.50 | 4.43 | 2.90 | 2.54 |
| 25 | 3.20 | 3.10 | 3.13 | 2.80 | 2.73 | 2.81 | 4.25 | 4.30 | 6.00 | 4.60 | 2.80 | 2.54 |
| 26 | 3.20 | 3.10 | 3.14 | 2.80 | 2.72 | 2.80 | 4.15 | 4.30 | 5.60 | 4.90 | 2.80 | 2.53 |
| 27 | 3.20 | 3.10 | 3.15 | 2.80 | 2.72 | 2.80 | 3.98 | 4.40 | 5.50 | 4.80 | 2.80 | 2.53 |
| 28 | 3.30 | 3.10 | 3.15 | 2.75 | 2.72 | 2.80 | 3.96 | 4.50 | 5.20 | 4.70 | 2.70 | 2.51 |
| 29 | 3.30 | 3.10 | 3.16 | 2.75 | ...... | 2.79 | 3.94 | 4.50 | 5.20 | 4.60 | 2.70 | 2.50 |
| 30 | 3.30 | 3.10 | 3.16 | 2.75 | ...... | 2.79 | 4.00 | 4.55 | 5.40 | 4.30 | 2.70 | 2.50 |
| 31 | 3.30 | ...... | 3.15 | 2.75 | ...... | 2.78 | ...... | 4.58 | ...... | 4.00 | 2.70 | ...... |

NOTE.—Oct. 8 to Dec. 31, 1905, readings made on new gage and reduced to same datum as gage used during the first part of the year.

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|
| 1906. | | | | 1906. | | | |
| 1 | 2.50 | 3.58 | 2.54 | 16 | 3.00 | 2.56 | 2.54 |
| 2 | 2.50 | 3.57 | 2.54 | 17 | 3.10 | 2.56 | 2.54 |
| 3 | 2.50 | 3.55 | 2.54 | 18 | 3.20 | 2.56 | 2.53 |
| 4 | 2.50 | 3.54 | 2.54 | 19 | 3.40 | 2.56 | 2.53 |
| 5 | 2.50 | 3.59 | 2.54 | 20 | 3.50 | 2.55 | 2.53 |
| 6 | 2.50 | 3.60 | 2.54 | 21 | 3.50 | 2.55 | 2.53 |
| 7 | 2.55 | 3.58 | 2.54 | 22 | 3.70 | 2.55 | 2.53 |
| 8 | 2.58 | 3.56 | 2.54 | 23 | 3.70 | 2.55 | 2.53 |
| 9 | 2.60 | 3.53 | 2.54 | 24 | 3.70 | 2.55 | 2.53 |
| 10 | 2.60 | 3.50 | 2.54 | 25 | 3.70 | 2.54 | 2.53 |
| 11 | 2.61 | 3.50 | 2.54 | 26 | 3.65 | 2.54 | 2.53 |
| 12 | 2.63 | 3.58 | 2.54 | 27 | 3.64 | 2.54 | 2.53 |
| 13 | 2.65 | 2.58 | 2.55 | 28 | 3.63 | 2.54 | 2.53 |
| 14 | 2.67 | 2.58 | 2.56 | 29 | 3.62 | 2.54 | 2.54 |
| 15 | 2.69 | 2.57 | 2.56 | 30 | 3.61 | 2.54 | 2.54 |
| | | | | 31 | 3.59 | ...... | 2.54 |

*Daily gage height, in feet, of East Fork of Carson River, near Gardnerville, Nev., for 1908–1910.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1908.** | | | | | | | | | |
| 1 | 3.9 | 2.6 | 2.5 | 2.9 | 3.9 | 3.5 | 3.2 | 2.5 | 2.5 |
| 2 | 3.9 | 2.5 | 2.4 | 2.8 | 3.7 | 3.4 | 3.1 | 2.6 | 2.5 |
| 3 | 3.9 | 2.6 | 2.4 | 2.8 | 3.6 | 3.4 | 3.1 | 2.7 | 2.5 |
| 4 | 3.9 | 2.5 | 2.5 | 2.9 | 3.5 | 3.4 | 3.1 | 2.6 | 2.5 |
| 5 | 4.1 | 2.6 | 2.6 | 3.0 | 3.7 | 3.5 | 3.1 | 2.5 | 2.5 |
| 6 | 3.7 | 2.6 | 2.5 | 3.0 | 3.8 | 3.6 | 3.1 | 2.5 | 2.5 |
| 7 | 3.6 | 2.7 | 2.4 | 3.0 | 3.9 | 3.7 | 3.1 | 2.5 | 2.5 |
| 8 | 3.6 | 2.6 | 2.5 | 2.9 | 3.5 | 3.7 | 3.0 | 2.5 | 2.5 |
| 9 | 3.7 | 2.7 | 2.6 | 2.9 | 3.4 | 3.8 | 3.0 | 2.5 | 2.5 |
| 10 | 3.7 | 2.6 | 2.6 | 3.0 | 3.3 | 4.1 | 2.9 | 2.5 | 2.5 |
| 11 | 3.5 | 2.6 | 2.6 | 3.3 | 3.5 | 4.0 | 2.9 | 2.5 | 2.5 |
| 12 | 3.1 | 2.7 | 2.7 | 3.4 | 3.5 | 3.8 | 3.0 | 2.5 | 2.5 |
| 13 | 3.0 | 2.6 | 2.7 | 3.6 | 3.5 | 4.2 | 2.9 | 2.5 | 2.5 |
| 14 | 2.8 | 2.6 | 2.7 | 3.8 | 3.4 | 3.7 | 2.9 | 2.5 | 2.5 |
| 15 | 2.8 | 2.7 | 2.7 | 3.5 | 3.3 | 3.6 | 2.8 | 2.5 | 2.5 |
| 16 | 2.7 | 2.7 | 2.7 | 3.5 | 3.2 | 3.6 | 2.8 | 2.5 | 2.5 |
| 17 | 2.7 | 2.6 | 2.8 | 3.4 | 3.2 | 3.6 | 2.7 | 2.5 | 2.5 |
| 18 | 2.7 | 2.5 | 2.7 | 3.6 | 3.3 | 3.5 | 2.7 | 2.5 | 2.5 |
| 19 | 2.8 | 2.6 | 2.7 | 3.8 | 3.3 | 3.5 | 2.7 | 2.5 | 2.5 |
| 20 | 2.8 | 2.6 | 2.8 | 3.9 | 3.4 | 3.5 | 2.6 | 2.5 | 2.5 |
| 21 | 2.7 | 2.5 | 2.8 | 3.9 | 3.4 | 3.4 | 2.6 | 2.5 | 2.5 |
| 22 | 2.7 | 2.5 | 2.8 | 3.7 | 3.5 | 3.4 | 2.6 | 2.5 | 2.5 |
| 23 | 2.7 | 2.5 | 2.7 | 3.5 | 3.5 | 3.4 | 2.6 | 2.5 | 2.5 |
| 24 | 2.8 | 2.6 | 2.8 | 3.3 | 3.6 | 3.2 | 2.5 | 2.5 | 2.5 |
| 25 | 2.9 | 2.5 | 2.7 | 3.2 | 3.7 | 3.2 | 2.5 | 2.5 | 2.5 |
| 26 | 2.8 | 2.6 | 3.0 | 3.5 | 3.8 | 3.2 | 2.5 | 2.5 | 2.5 |
| 27 | 2.8 | 2.4 | 2.9 | 3.6 | 3.7 | 3.3 | 2.5 | 2.5 | 2.5 |
| 28 | 2.9 | 2.5 | 2.9 | 3.8 | 3.8 | 3.2 | 2.5 | 2.5 | 2.5 |
| 29 | 2.7 | 2.4 | 2.9 | 3.9 | 3.9 | 3.2 | 2.5 | 2.5 | 2.5 |
| 30 | 2.7 | ...... | 2.9 | 3.9 | 3.9 | 3.2 | 2.5 | 2.5 | 2.5 |
| 31 | 2.6 | ...... | 2.9 | ...... | 3.8 | ...... | 2.5 | 2.5 | ...... |

NOTE.—Gage heights for Jan. 1 to Mar. 26, 1908, were observed at the old station at Rodenbah's ranch and have been reduced to readings at the new station by the approximate relation determined by simultaneous observations. Ice conditions Dec. 18 to 31, 1908.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1908–9.** | | | | | | | | | | | | |
| 1 | 2.5 | 2.4 | 2.4 | 2.4 | 2.8 | 2.7 | 2.9 | 5.0 | 6.0 | 5.0 | 3.0 | 2.6 |
| 2 | 2.5 | 2.4 | 2.4 | 2.4 | 2.7 | 2.7 | 3.1 | 4.85 | 6.25 | 4.8 | 3.0 | 2.6 |
| 3 | 2.5 | 2.4 | 2.4 | 2.4 | 2.7 | 2.7 | 3.4 | 5.0 | 6.45 | 4.7 | 3.0 | 2.6 |
| 4 | 2.5 | 2.4 | 2.4 | 2.4 | 2.7 | 2.7 | 3.4 | 5.3 | 6.85 | 4.5 | 2.9 | 2.6 |
| 5 | 2.5 | 2.4 | 2.4 | 2.9 | 2.7 | 2.7 | 3.3 | 5.3 | 6.8 | 4.4 | 2.9 | 2.6 |
| 6 | 2.5 | 2.4 | 2.4 | 3.2 | 2.7 | 2.7 | 3.2 | 5.4 | 6.05 | 4.2 | 2.9 | 2.6 |
| 7 | 2.5 | 2.4 | 2.4 | 2.5 | 2.7 | 2.7 | 3.1 | 5.4 | 5.6 | 4.2 | 2.9 | 2.6 |
| 8 | 2.5 | 2.4 | 2.4 | 2.6 | 2.7 | 2.7 | 3.1 | 5.3 | 5.35 | 4.2 | 2.8 | 2.6 |
| 9 | 2.5 | 2.4 | 2.4 | 2.4 | 2.7 | 2.7 | 3.2 | 5.3 | 5.35 | 4.0 | 2.8 | 2.6 |
| 10 | 2.5 | 2.4 | 2.4 | 2.4 | 2.7 | 2.7 | 3.3 | 5.1 | 5.35 | 4.0 | 2.7 | 2.6 |
| 11 | 2.4 | 2.4 | 2.4 | 2.4 | 2.7 | 2.7 | 3.4 | 4.8 | 5.35 | 4.0 | 2.7 | 2.6 |
| 12 | 2.4 | 2.4 | 2.4 | 2.7 | 2.7 | 2.7 | 3.5 | 4.6 | 5.6 | 4.0 | 2.7 | 2.6 |
| 13 | 2.4 | 2.4 | 2.4 | 3.3 | 2.7 | 2.7 | 3.7 | 4.3 | 5.6 | 3.9 | 2.7 | 2.6 |
| 14 | 2.4 | 2.4 | 2.5 | 5.85 | 2.7 | 2.7 | 3.85 | 4.45 | 5.4 | 3.8 | 2.7 | 2.6 |
| 15 | 2.7 | 2.4 | 2.5 | 5.8 | 2.7 | 2.8 | 4.15 | 4.45 | 5.7 | 3.8 | 2.7 | 2.6 |
| 16 | 2.5 | 2.4 | 2.4 | 5.2 | 2.9 | 2.8 | 4.3 | 4.45 | 5.4 | 3.7 | 2.7 | 2.6 |
| 17 | 2.5 | 2.4 | 2.4 | 4.0 | 3.4 | 2.8 | 4.65 | 4.5 | 4.9 | 3.7 | 2.6 | 2.6 |
| 18 | 2.4 | 2.4 | 2.4 | 3.65 | 3.0 | 2.8 | 4.7 | 4.6 | 4.9 | 3.6 | 2.6 | 2.6 |
| 19 | 2.4 | 2.4 | 2.3 | 3.45 | 2.9 | 2.8 | 4.65 | 4.8 | 4.8 | 3.5 | 2.6 | 2.6 |
| 20 | 2.4 | 2.4 | 2.4 | 4.1 | 2.8 | 2.8 | 4.3 | 4.9 | 4.7 | 3.4 | 2.6 | 2.6 |
| 21 | 2.4 | 2.4 | 2.5 | 4.8 | 2.7 | 2.8 | 4.05 | 5.1 | 5.0 | 3.2 | 2.6 | 2.6 |
| 22 | 2.4 | 2.4 | 2.5 | 3.5 | 2.7 | 2.8 | 3.9 | 4.7 | 5.2 | 3.2 | 2.6 | 2.6 |
| 23 | 2.4 | 2.4 | 2.4 | 3.2 | 2.7 | 2.8 | 3.9 | 4.4 | 5.3 | 3.2 | 2.6 | 2.6 |
| 24 | 2.4 | 2.4 | 2.5 | 3.2 | 2.6 | 2.8 | 4.05 | 4.2 | 5.4 | 3.1 | 2.6 | 2.6 |
| 25 | 2.4 | 2.4 | 2.5 | 3.1 | 2.6 | 2.8 | 4.05 | 4.4 | 5.4 | 3.1 | 2.6 | 2.6 |
| 26 | 2.4 | 2.5 | 2.5 | 3.0 | 2.6 | 2.8 | 4.35 | 4.7 | 5.4 | 3.0 | 2.6 | 2.6 |
| 27 | 2.4 | 2.5 | 2.5 | 3.0 | 2.7 | 2.8 | 4.55 | 4.9 | 5.4 | 3.0 | 2.6 | 2.6 |
| 28 | 2.4 | 2.4 | 2.5 | 2.9 | 2.7 | 2.8 | 4.6 | 4.8 | 5.4 | 3.0 | 2.6 | 2.6 |
| 29 | 2.4 | 2.4 | 2.5 | 2.9 | ...... | 2.8 | 4.7 | 4.7 | 5.3 | 3.0 | 2.6 | 2.6 |
| 30 | 2.4 | 2.4 | 2.4 | 2.9 | ...... | 2.8 | 4.8 | 4.7 | 5.2 | 3.0 | 2.6 | 2.6 |
| 31 | 2.4 | ...... | 2.4 | 2.8 | ...... | 2.8 | ...... | 4.7 | ...... | 3.0 | 2.6 | ...... |

*Daily gage height, in feet, of East Fork of Carson River near Gardnerville, Nev., for 1908-1910*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | 2.7 | 2.6 | 4.8 | 3.0 | 2.8 | 3.2 | 3.3 | 4.1 | 5.1 | 3.2 | 2.6 | 2.5 |
| 2 | 2.7 | 2.6 | 3.2 | 3.0 | 2.8 | 3.2 | 3.3 | 4.1 | 4.9 | 3.1 | 2.55 | 2.5 |
| 3 | 2.6 | 2.6 | 3.2 | 2.8 | 2.8 | 3.2 | 3.3 | 4.0 | 4.6 | 3.1 | 2.5 | 2.5 |
| 4 | 2.6 | 2.6 | 3.0 | 2.7 | 2.8 | 3.2 | 3.4 | 4.0 | 4.4 | 3.1 | 2.5 | 2.5 |
| 5 | 2.6 | 2.6 | 3.0 | 2.7 | 2.8 | 3.5 | 4.0 | 3.7 | 4.1 | 3.1 | 2.5 | 2.5 |
| 6 | 2.6 | 2.6 | 3.0 | 2.7 | 2.8 | 3.4 | 4.3 | 3.9 | 4.3 | 3.1 | 2.45 | 2.5 |
| 7 | 2.6 | 2.6 | 3.0 | 2.7 | 2.8 | 3.4 | 4.4 | 4.3 | 4.0 | 3.0 | 2.45 | 2.5 |
| 8 | 2.6 | 2.6 | 3.0 | 2.7 | 2.8 | 3.4 | 4.5 | 4.6 | 3.9 | 3.0 | 2.45 | 2.5 |
| 9 | 2.6 | 2.6 | 3.0 | 2.7 | 2.8 | 3.4 | 4.2 | 5.0 | 3.9 | 3.0 | 2.45 | 2.5 |
| 10 | 2.6 | 2.6 | 3.0 | 2.7 | 2.8 | 3.4 | 4.0 | 5.5 | 3.7 | 2.9 | 2.45 | 2.5 |
| 11 | 2.6 | 2.6 | 3.0 | 2.7 | 2.9 | 3.4 | 4.1 | 4.8 | 3.8 | 2.9 | 2.45 | 2.5 |
| 12 | 2.6 | 2.6 | 3.0 | 2.7 | 2.9 | 3.4 | 3.7 | 4.6 | 3.9 | 2.9 | 2.45 | 2.5 |
| 13 | 2.6 | 2.6 | 3.0 | 2.7 | 2.7 | 3.4 | 3.9 | 4.5 | 3.8 | 2.8 | 2.45 | 2.5 |
| 14 | 2.6 | 2.6 | 3.0 | 2.7 | 2.7 | 3.6 | 4.1 | 4.5 | 3.8 | 2.8 | 2.45 | 2.55 |
| 15 | 2.6 | 2.6 | 3.0 | 2.7 | 2.7 | 3.4 | 4.0 | 4.7 | 3.7 | 2.7 | 2.45 | 2.6 |
| 16 | 2.6 | 2.6 | 3.0 | 2.7 | 2.7 | 3.4 | 4.0 | 4.6 | 3.6 | 2.7 | 2.45 | 2.6 |
| 17 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 3.4 | 4.5 | 3.9 | 3.6 | 2.7 | 2.45 | 2.55 |
| 18 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 4.3 | 4.7 | 4.5 | 3.5 | 3.25 | 2.45 | 2.55 |
| 19 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 4.5 | 4.8 | 4.5 | 3.5 | 3.0 | 2.45 | 2.55 |
| 20 | 2.6 | 2.6 | 2.7 | 2.7 | 2.8 | 4.2 | 5.0 | 4.5 | 3.4 | 3.25 | 2.45 | 2.5 |
| 21 | 2.6 | 5.6 | 2.7 | 2.7 | 2.8 | 3.9 | 4.6 | 4.6 | 3.3 | 3.0 | 2.45 | 2.5 |
| 22 | 2.6 | 3.5 | 2.7 | 3.5 | 2.8 | 3.8 | 4.7 | 4.8 | 3.3 | 2.9 | 2.45 | 2.5 |
| 23 | 2.6 | 3.3 | 2.7 | 3.7 | 2.8 | 3.5 | 4.7 | 4.9 | 3.3 | 2.9 | 2.45 | 2.5 |
| 24 | 2.6 | 3.3 | 2.7 | 2.8 | 2.8 | 3.3 | 4.9 | 5.6 | 3.3 | 2.9 | 2.45 | 2.5 |
| 25 | 2.6 | 3.3 | 2.7 | 2.7 | 2.8 | 3.2 | 5.0 | 4.5 | 3.3 | 2.8 | 2.5 | 2.5 |
| 26 | 2.6 | 3.3 | 2.7 | 2.7 | 2.8 | 3.2 | 5.1 | 4.6 | 3.3 | 2.75 | 2.5 | 2.5 |
| 27 | 2.6 | 3.3 | 2.7 | 2.7 | 2.8 | 3.2 | 5.2 | 4.9 | 3.3 | 2.7 | 2.5 | 2.5 |
| 28 | 2.6 | 3.3 | 2.7 | 2.7 | 3.5 | 3.2 | 5.1 | 4.9 | 3.3 | 2.7 | 2.5 | 2.5 |
| 29 | 2.6 | 3.3 | 2.7 | 2.7 | ...... | 3.2 | 4.5 | 4.9 | 3.2 | 2.7 | 2.5 | 2.5 |
| 30 | 2.6 | 3.3 | 2.7 | 2.8 | ...... | 3.2 | 4.8 | 5.0 | 3.2 | 2.6 | 2.5 | 2.5 |
| 31 | 2.6 | ...... | 4.7 | 2.8 | ...... | 3.3 | ...... | 5.1 | ...... | 2.6 | ...... | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|
| 1910. | | | | 1910. | | | |
| 1 | 2.5 | 2.5 | 2.55 | 16 | 2.5 | 2.5 | 2.6 |
| 2 | 2.5 | 2.5 | 2.55 | 17 | 2.5 | 2.5 | 2.6 |
| 3 | 2.5 | 2.5 | 2.9 | 18 | 2.5 | 2.5 | 2.6 |
| 4 | 2.5 | 2.5 | 2.9 | 19 | 2.5 | 2.5 | 2.6 |
| 5 | 2.5 | 2.5 | 2.8 | 20 | 2.5 | 2.5 | 2.6 |
| 6 | 2.5 | 2.5 | 2.7 | 21 | 2.5 | 2.5 | 2.6 |
| 7 | 2.5 | 2.5 | 2.7 | 22 | 2.5 | 2.5 | 2.6 |
| 8 | 2.5 | 2.5 | 2.6 | 23 | 2.5 | 2.5 | 2.55 |
| 9 | 2.5 | 2.5 | 2.6 | 24 | 2.5 | 2.5 | 2.55 |
| 10 | 2.5 | 2.5 | 2.6 | 25 | 2.5 | 2.5 | 2.55 |
| 11 | 2.5 | 2.5 | 2.6 | 26 | 2.5 | 2.5 | 2.55 |
| 12 | 2.5 | 2.5 | 2.6 | 27 | 2.5 | 2.55 | ........ |
| 13 | 2.5 | 2.5 | 2.6 | 28 | 2.5 | 2.55 | ........ |
| 14 | 2.5 | 2.5 | 2.6 | 29 | 2.5 | 2.55 | ........ |
| 15 | 2.5 | 2.5 | 2.6 | 30 | 2.5 | 2.55 | ........ |
| | | | | 31 | 2.5 | ........ | ........ |

*Rating tables for East Fork of Carson River near Gardnerville, Nev.*

**October 17, 1900, to August 2, 1901; December 5 to December 31, 1901.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.80 | 11 | 3.40 | 157 | 5.00 | 1,141 | 6.60 | 2,442 |
| 2.00 | 17 | 3.60 | 219 | 5.20 | 1,286 | 6.80 | 2,619 |
| 2.20 | 25 | 3.80 | 313 | 5.40 | 1,435 | 7.00 | 2,798 |
| 2.40 | 35 | 4.00 | 438 | 5.60 | 1,590 | 7.20 | 2,979 |
| 2.60 | 48 | 4.20 | 575 | 5.80 | 1,752 | 7.40 | 3,162 |
| 2.80 | 65 | 4.40 | 715 | 6.00 | 1,922 | | |
| 3.00 | 86 | 4.60 | 856 | 6.20 | 2,094 | | |
| 3.20 | 115 | 4.80 | 998 | 6.40 | 2,267 | | |

*Rating tables for East Fork of Carson River near Gardnerville, Nev.*—Continued.

**August 1 to December 4, 1901.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 3.00 | 35 | 3.40 | 85 | 3.80 | 179 | 4.20 | 401 |
| 3.20 | 57 | 3.60 | 122 | 4.00 | 271 | 4.40 | 550 |

**January 1 to December 31, 1902.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.5 | 30 | 3.4 | 85 | 4.3 | 519 | 5.2 | 1.200 |
| 2.6 | 34 | 3.5 | 98 | 4.4 | 598 | 5.3 | 1,275 |
| 2.7 | 38 | 3.6 | 115 | 4.5 | 675 | 5.4 | 1,350 |
| 2.8 | 42 | 3.7 | 140 | 4.6 | 750 | 5.5 | 1,425 |
| 2.9 | 46 | 3.8 | 180 | 4.7 | 825 | 5.6 | 1.500 |
| 3.0 | 51 | 3.9 | 233 | 4.8 | 900 | 5.7 | 1.575 |
| 3.1 | 57 | 4.0 | 297 | 4.9 | 975 | 5.8 | 1.650 |
| 3.2 | 65 | 4.1 | 368 | 5.0 | 1,050 | 5.9 | 1.725 |
| 3.3 | 74 | 4.2 | 441 | 5.1 | 1,125 | 6.0 | 1.800 |

**January 1 to December 31, 1903.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.2 | 21 | 3.2 | 82 | 4.2 | 375 | 5.4 | 1.285 |
| 2.3 | 25 | 3.3 | 97 | 4.3 | 430 | 5.6 | 1.475 |
| 2.4 | 29 | 3.4 | 115 | 4.4 | 485 | 5.8 | 1.665 |
| 2.5 | 34 | 3.5 | 135 | 4.5 | 550 | 6.0 | 1,855 |
| 2.6 | 39 | 3.6 | 155 | 4.6 | 620 | 6.2 | 2.045 |
| 2.7 | 45 | 3.7 | 180 | 4.7 | 680 | 6.4 | 2.235 |
| 2.8 | 51 | 3.8 | 210 | 4.8 | 760 | 6.6 | 2,425 |
| 2.9 | 58 | 3.9 | 240 | 4.9 | 840 | 6.8 | 2.615 |
| 3.0 | 65 | 4.0 | 280 | 5.0 | 920 | 7.0 | 2.805 |
| 3.1 | 72 | 4.1 | 325 | 5.2 | 1.100 | | |

**January 1 to July 31, 1904.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.00 | 8 | 3.40 | 114 | 4.80 | 833 | 6.20 | 2.130 |
| 2.10 | 9 | 3.50 | 134 | 4.90 | 915 | 6.30 | 2,230 |
| 2.20 | 11 | 3.60 | 158 | 5.00 | 1,000 | 6.40 | 2,330 |
| 2.30 | 14 | 3.70 | 186 | 5.10 | 1.085 | 6.50 | 2,430 |
| 2.40 | 18 | 3.80 | 218 | 5.20 | 1.175 | 6.60 | 2.540 |
| 2.50 | 23 | 3.90 | 254 | 5.30 | 1,265 | 6.70 | 2,650 |
| 2.60 | 29 | 4.00 | 295 | 5.40 | 1,355 | 6.80 | 2,760 |
| 2.70 | 36 | 4.10 | 342 | 5.50 | 1,450 | 6.90 | 2.870 |
| 2.80 | 43 | 4.20 | 397 | 5.60 | 1.545 | 7.00 | 2.980 |
| 2.90 | 51 | 4.30 | 459 | 5.70 | 1.640 | 7.20 | 3,200 |
| 3.00 | 60 | 4.40 | 527 | 5.80 | 1.735 | 7.40 | 3.420 |
| 3.10 | 71 | 4.50 | 600 | 5.90 | 1.830 | | |
| 3.20 | 83 | 4.60 | 675 | 6.00 | 1.930 | | |
| 3.30 | 97 | 4.70 | 753 | 6.10 | 2,030 | | |

NOTE.—Table applicable only to open channel. It is based upon 5 discharge measurements made during first part of 1904 and several low-water measurements of 1903. It is well defined between gage heights 3 feet and 5 feet. Owing to back water from temporary dam the table is not applicable after July 31, 1904.

**January 1 to July 15, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.00 | 8 | 2.80 | 43 | 3.60 | 158 | 4.40 | 527 |
| 2.10 | 9 | 2.90 | 51 | 3.70 | 186 | 4.50 | 600 |
| 2.20 | 11 | 3.00 | 60 | 3.80 | 218 | 4.60 | 675 |
| 2.30 | 14 | 3.10 | 71 | 3.90 | 254 | 4.70 | 753 |
| 2.40 | 18 | 3.20 | 83 | 4.00 | 295 | 4.80 | 833 |
| 2.50 | 23 | 3.30 | 97 | 4 10 | 342 | 4.90 | 915 |
| 2.60 | 29 | 3.40 | 114 | 4.20 | 397 | 5.00 | 1.000 |
| 2.70 | 36 | 3.50 | 134 | 4.30 | 459 | | |

NOTE.—Table is applicable only to open channel. It is based on discharge measurements made during first half of 1904 and 1905, and several low-water measurements of 1903. It is well defined between gage heights 3 feet and 5 feet. Above 5 feet the curve depends on 1 measurement at gage height 6.15 feet.

**January 1 to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.30 | 82 | 2.80 | 213 | 3.30 | 420 | 3.80 | 675 |
| 2.40 | 104 | 2.90 | 250 | 3.40 | 470 | 3.90 | 730 |
| 2.50 | 128 | 3.00 | 290 | 3.50 | 520 | 4.00 | 790 |
| 2.60 | 154 | 3.10 | 330 | 3.60 | 570 | 4.10 | 860 |
| 2.70 | 182 | 3.20 | 375 | 3.70 | 620 | 4.20 | 940 |

NOTE.—Table applicable only to open channel. It is based on 6 discharge measurements made during 1906, and is well defined between gage heights 2.5 feet and 3.5 feet.

*Daily discharge, in second-feet, of East Fork of Carson River near Gardnerville, Nev., for 1909–10.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 104 | 213 | 182 | 250 | 1,520 | 2,480 | 1,520 | 290 | 154 |
| 2 | 104 | 182 | 182 | 330 | 1,400 | 2,760 | 1,360 | 290 | 154 |
| 3 | 104 | 182 | 182 | 470 | 1,520 | 2,980 | 1,280 | 290 | 154 |
| 4 | 104 | 182 | 182 | 470 | 1,790 | 3,430 | 1,120 | 250 | 154 |
| 5 | 250 | 182 | 182 | 420 | 1,790 | 3,370 | 1,050 | 250 | 154 |
| 6 | 375 | 182 | 182 | 375 | 1,880 | 2,540 | 910 | 250 | 154 |
| 7 | 128 | 182 | 182 | 330 | 1,880 | 2,070 | 910 | 250 | 154 |
| 8 | 154 | 182 | 182 | 330 | 1,790 | 1,840 | 910 | 213 | 154 |
| 9 | 104 | 182 | 182 | 375 | 1,790 | 1,840 | 790 | 213 | 154 |
| 10 | 104 | 182 | 182 | 420 | 1,610 | 1,840 | 790 | 182 | 154 |
| 11 | 104 | 182 | 182 | 470 | 1,360 | 1,840 | 790 | 182 | 154 |
| 12 | 182 | 182 | 182 | 520 | 1,200 | 2,070 | 790 | 182 | 154 |
| 13 | 420 | 182 | 182 | 620 | 980 | 2,070 | 730 | 182 | 154 |
| 14 | 2,320 | 182 | 182 | 702 | 1,080 | 1,880 | 675 | 182 | 154 |
| 15 | 2,270 | 182 | 213 | 880 | 1,080 | 2,170 | 675 | 182 | 154 |
| 16 | 1,700 | 250 | 213 | 980 | 1,080 | 1,880 | 620 | 182 | 154 |
| 17 | 790 | 470 | 213 | 1,240 | 1,120 | 1,440 | 620 | 154 | 154 |
| 18 | 505 | 290 | 213 | 1,280 | 1,200 | 1,440 | 570 | 154 | 154 |
| 19 | 495 | 250 | 213 | 1,240 | 1,360 | 1,360 | 520 | 154 | 154 |
| 20 | 850 | 213 | 213 | 980 | 1,440 | 1,280 | 470 | 154 | 154 |
| 21 | 1,360 | 182 | 213 | 830 | 1,610 | 1,520 | 375 | 154 | 154 |
| 22 | 520 | 182 | 213 | 730 | 1,280 | 1,700 | 375 | 154 | 154 |
| 23 | 375 | 182 | 213 | 730 | 1,050 | 1,790 | 375 | 154 | 154 |
| 24 | 375 | 154 | 213 | 820 | 910 | 1,880 | 330 | 154 | 154 |
| 25 | 330 | 154 | 213 | 820 | 1,050 | 1,880 | 330 | 154 | 154 |
| 26 | 290 | 154 | 213 | 1,020 | 1,280 | 1,880 | 290 | 154 | 154 |
| 27 | 290 | 182 | 213 | 1,160 | 1,440 | 1,880 | 290 | 154 | 154 |
| 28 | 250 | 182 | 213 | 1,200 | 1,360 | 1,880 | 290 | 154 | 154 |
| 29 | 250 | ........ | 213 | 1,280 | 1,280 | 1,790 | 290 | 154 | 154 |
| 30 | 250 | ........ | 213 | 1,360 | 1,280 | 1,700 | 290 | 154 | 154 |
| 31 | 213 | ........ | 213 | ........ | 1,280 | ........ | 290 | 154 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 182 | 154 | 1,360 | 290 | 200 | 390 | 440 | 900 | 1,620 | 390 | 123 | 90 |
| 2 | 182 | 154 | 375 | 290 | 200 | 390 | 440 | 900 | 1,460 | 340 | 106 | 90 |
| 3 | 154 | 154 | 375 | 200 | 200 | 390 | 440 | 840 | 1,240 | 340 | 90 | 90 |
| 4 | 154 | 154 | 290 | 160 | 200 | 390 | 493 | 840 | 1,100 | 340 | 90 | 90 |
| 5 | 154 | 154 | 290 | 160 | 200 | 546 | 840 | 660 | 900 | 340 | 90 | 90 |
| 6 | 154 | 154 | 290 | 160 | 200 | 493 | 1,030 | 780 | 1,030 | 340 | 75 | 90 |
| 7 | 154 | 154 | 290 | 100 | 200 | 493 | 1,100 | 1,030 | 840 | 290 | 75 | 90 |
| 8 | 154 | 154 | 290 | 160 | 200 | 493 | 1,170 | 1,240 | 780 | 290 | 75 | 90 |
| 9 | 154 | 154 | 290 | 160 | 200 | 493 | 960 | 1,540 | 780 | 290 | 75 | 90 |
| 10 | 154 | 154 | 290 | 160 | 200 | 493 | 840 | 1,940 | 660 | 245 | 75 | 90 |
| 11 | 154 | 154 | 290 | 100 | 245 | 493 | 900 | 1,380 | 720 | 245 | 75 | 90 |
| 12 | 154 | 154 | 290 | 160 | 245 | 493 | 660 | 1,240 | 780 | 245 | 75 | 90 |
| 13 | 154 | 154 | 290 | 160 | 160 | 493 | 780 | 1,170 | 720 | 200 | 75 | 90 |
| 14 | 154 | 154 | 290 | 160 | 160 | 600 | 900 | 1,170 | 720 | 200 | 75 | 106 |
| 15 | 154 | 154 | 290 | 160 | 160 | 493 | 840 | 1,310 | 660 | 160 | 75 | 123 |
| 16 | 154 | 154 | 290 | 160 | 160 | 493 | 840 | 1,240 | 600 | 160 | 75 | 123 |
| 17 | 154 | 154 | 182 | 160 | 160 | 493 | 1,170 | 780 | 600 | 160 | 75 | 106 |
| 18 | 154 | 154 | 182 | 160 | 160 | 1,030 | 1,310 | 1,170 | 546 | 415 | 75 | 106 |
| 19 | 154 | 154 | 182 | 160 | 160 | 1,170 | 1,380 | 1,170 | 546 | 290 | 75 | 106 |
| 20 | 154 | 154 | 182 | 160 | 200 | 960 | 1,540 | 1,170 | 493 | 415 | 75 | 90 |
| 21 | 154 | 2,070 | 182 | 160 | 200 | 780 | 1,240 | 1,240 | 440 | 290 | 75 | 90 |
| 22 | 154 | 520 | 182 | 546 | 200 | 720 | 1,310 | 1,380 | 440 | 245 | 75 | 90 |
| 23 | 154 | 420 | 182 | 660 | 200 | 546 | 1,310 | 1,460 | 440 | 245 | 75 | 90 |
| 24 | 154 | 420 | 182 | 200 | 200 | 440 | 1,460 | 2,020 | 440 | 245 | 75 | 90 |
| 25 | 154 | 420 | 182 | 160 | 200 | 390 | 1,540 | 1,170 | 440 | 200 | 90 | 90 |
| 26 | 154 | 420 | 182 | 160 | 200 | 390 | 1,620 | 1,240 | 440 | 180 | 90 | 90 |
| 27 | 154 | 420 | 182 | 160 | 200 | 390 | 1,700 | 1,460 | 440 | 160 | 90 | 90 |
| 28 | 154 | 420 | 182 | 160 | 546 | 390 | 1,620 | 1,460 | 440 | 160 | 90 | 90 |
| 29 | 154 | 420 | 182 | 160 | ....... | 390 | 1,170 | 1,460 | 390 | 160 | 90 | 90 |
| 30 | 154 | 420 | 182 | 200 | ....... | 390 | 1,030 | 1,540 | 390 | 123 | 90 | 90 |
| 31 | 154 | ....... | 1,280 | 200 | ....... | 440 | ....... | 1,620 | ....... | 123 | 90 | ..... |

*Daily discharge, in second-feet, of East Fork of Carson River near Gardnerville, Nev., for 1909–10*—Continued.

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|
| 1910. | | | | 1910. | | | |
| 1 | 90 | 90 | 106 | 16 | 90 | 90 | 123 |
| 2 | 90 | 90 | 106 | 17 | 90 | 90 | 123 |
| 3 | 90 | 90 | 245 | 18 | 90 | 90 | 123 |
| 4 | 90 | 90 | 245 | 19 | 90 | 90 | 123 |
| 5 | 90 | 90 | 200 | 20 | 90 | 90 | 123 |
| 6 | 90 | 90 | 160 | 21 | 90 | 90 | 123 |
| 7 | 90 | 90 | 160 | 22 | 90 | 90 | 123 |
| 8 | 90 | 90 | 123 | 23 | 90 | 90 | 106 |
| 9 | 90 | 90 | 123 | 24 | 90 | 90 | 106 |
| 10 | 90 | 90 | 123 | 25 | 90 | 90 | 106 |
| 11 | 90 | 90 | 123 | 26 | 90 | 90 | 106 |
| 12 | 90 | 90 | 123 | 27 | 90 | 106 | 106 |
| 13 | 90 | 90 | 123 | 28 | 90 | 106 | 106 |
| 14 | 90 | 90 | 123 | 29 | 90 | 106 | 90 |
| 15 | 90 | 90 | 123 | 30 | 90 | 106 | 90 |
| | | | | 31 | 90 | ........ | 90 |

NOTE.—Daily discharge determined from rating curves applicable as follows:
Jan. 1 to Dec. 31, 1909, well defined between discharges of 128 and 1,790 second-feet.
Jan. 1 to Dec. 31, 1910, fairly well defined. Discharge estimated Dec. 27–31, 1910.

*Monthly discharge of East Fork of Carson River near Gardnerville, Nev., for 1890–1892.*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). |
|---|---|---|
| **1890.** | | |
| April | 1,026 | 61,300 |
| May | 2,654 | 163,000 |
| June | 2,430 | 145,000 |
| July | 1,789 | 110,000 |
| August | 597 | 36,700 |
| September | 415 | 24,700 |
| The period | ........ | 541,000 |
| **1890–91.** | | |
| October | 386 | 23,700 |
| November | 384 | 22,900 |
| December | 379 | 23,300 |
| January | 388 | 23,900 |
| February | 402 | 22,300 |
| March | 783 | 48,100 |
| April..c | 452 | 26,900 |
| May | 1,445 | 88,800 |
| June | 1,328 | 79,100 |
| July | 618 | 38,000 |
| August | 408 | 25,100 |
| September | 388 | 23,100 |
| The year | 613 | 445,000 |
| **1891–92.** | | |
| October | 365 | 23,700 |
| November | 385 | 22,900 |
| December | 436 | 26,900 |
| January | 390 | 24,000 |
| February | 388 | 22,300 |
| March | 422 | 25,900 |
| April | 478 | 28,400 |
| May | 1,226 | 75,600 |
| June | 1,158 | 69,000 |
| July | 506 | 31,100 |
| August | 413 | 25,400 |
| September | 414 | 24,600 |
| The year | 550 | 400,000 |
| **1892.** | | |
| October | 416 | 25,600 |
| November | 414 | 24,600 |
| December | 1,097 | 67,600 |

*Monthly discharge of East Fork of Carson River near Gardnerville, Nev., for 1900–1905.*

[Drainage area, 381 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1900–1901.** | | | | | | |
| October 17–31 | | | 38 | 0.100 | 0.06 | 1,130 |
| November | 75 | 30 | 41 | .108 | .12 | 2,440 |
| December | 35 | 30 | 34 | .089 | .10 | 2,091 |
| January | 86 | 14 | 34 | .089 | .10 | 2,091 |
| February | 2,267 | 14 | 664 | 1.743 | 1.82 | 36,877 |
| March | 927 | 219 | 464 | 1.218 | 1.26 | 28,531 |
| April | 927 | 261 | 582 | 1.527 | 1.70 | 34,632 |
| May | 3,162 | 856 | 1,822 | 4.782 | 5.51 | 112,033 |
| June | 2,008 | 1,141 | 1,492 | 3.916 | 4.37 | 88,780 |
| July | 1,512 | 313 | 741 | 1.945 | 2.24 | 45,562 |
| August | 626 | 85 | 259 | .680 | .79 | 16,026 |
| September | 220 | 85 | 139 | .365 | .41 | 8,271 |
| The per od | | | | | | 378,000 |
| **1901–92.** | | | | | | |
| October | 271 | 102 | 137 | .360 | .42 | 8,424 |
| November | 332 | 122 | 196 | .514 | .57 | 11,663 |
| December | 1,213 | 134 | 280 | .735 | .85 | 17,217 |
| January | 115 | 46 | 81 | .213 | .25 | 4,980 |
| February | 140 | 57 | 78 | .205 | .21 | 4,332 |
| March | 180 | 57 | 101 | .265 | .31 | 6,210 |
| April | 975 | 180 | 601 | 1.577 | 1.76 | 35,762 |
| May | 1,800 | 598 | 1,205 | 3.163 | 3.64 | 74,093 |
| June | 1,800 | 180 | 955 | 2.507 | 2.80 | 56,826 |
| July | 297 | 98 | 178 | .467 | .54 | 10,945 |
| August | 265 | 70 | 131 | .344 | .40 | 8,055 |
| September | 80 | 40 | 54 | .142 | .16 | 3,213 |
| The year | 1,800 | 40 | 333 | .874 | 11.91 | 242,000 |
| **1902–3.** | | | | | | |
| October | 65 | 44 | 51 | .134 | .15 | 3,136 |
| November | 297 | 46 | 86 | .226 | .25 | 5,117 |
| December | 85 | 28 | 54 | .142 | .16 | 3,320 |
| January | 39 | 25 | 32 | .08 | .10 | 1,968 |
| February | 42 | 21 | 31 | .08 | .08 | 1,722 |
| March | 430 | 45 | 135 | .36 | .42 | 8,301 |
| April | 1,617 | 457 | 890 | 2.34 | 2.61 | 52,959 |
| May | 2,852 | 550 | 1,794 | 4.71 | 5.43 | 110,309 |
| June | 2,567 | 880 | 1,714 | 4.50 | 5.02 | 101,990 |
| July | 840 | 115 | 356 | .93 | 1.07 | 21,889 |
| August | 225 | 97 | 143 | .38 | .44 | 8,793 |
| September | 135 | 51 | 73 | .19 | .21 | 4,344 |
| The year | 2,852 | 21 | 447 | 1.17 | 15.94 | 324,000 |
| **1903–4.** | | | | | | |
| October | 115 | 51 | 93 | .24 | .28 | 5,718 |
| November | 725 | 82 | 229 | .60 | .67 | 13,626 |
| December | 115 | 27 | 57 | .15 | .17 | 3,505 |
| January | 47 | 18 | 31.9 | .084 | .10 | 1,962 |
| February | 3,310 | 43 | 585 | 1.54 | 1.66 | 33,650 |
| March | 1,000 | 318 | 602 | 1.58 | 1.82 | 37,020 |
| April | 1,592 | 397 | 816 | 2.14 | 2.39 | 48,560 |
| May | 3,112 | 422 | 1,984 | 5.21 | 6.01 | 122,100 |
| June | 2,410 | 69 | 1,041 | 2.74 | 3.03 | 61,940 |
| July | 1,034 | 364 | 663 | 1.74 | 2.01 | 40,770 |
| The period | | | | | | 369,000 |
| **1905.** | | | | | | |
| January | 175 | 12 | 110 | .289 | .33 | 6,763 |
| February | 1,166 | 144 | 496 | 1.30 | 1.35 | 27,550 |
| March | 1,175 | 218 | 533 | 1.40 | 1.61 | 32,770 |
| April | 459 | 236 | 322 | .845 | .94 | 19,160 |
| May | 1,930 | 218 | 949 | 2.49 | 2.87 | 58,350 |
| June | 958 | 459 | 742 | 1.95 | 2.18 | 44,150 |
| July 1-15 | 507 | 212 | 346 | .908 | .51 | 10,290 |
| The period | | | | | | 199,000 |

NOTE.—Values for the winter periods may be in error on account of ice.

| | | | | |
|---|---|---|---|---|
| [illegible] | [illegible] | .39 | 5,530 | B. |
| [illegible] | [illegible] | .38 | 5,490 | B. |
| [illegible] | [illegible] | .41 | 7,870 | B. |

## SILVER CREEK NEAR MARKLEEVILLE, CAL.

Silver Creek [illegible] East Fork of Carson River.

The gaging station [illegible] located in the SE. ¼ sec. 14, T. 9 N., R. 20 E., in the Mono National Forest, at Silver Creek (an abandoned post office), 10 miles above Markleeville and 1¾ miles above the mouth of the river, was established November 12, 1910.

No water is diverted from this stream. Storage has been [illegible] in Upper and Lower Kinney lakes and Kinney Meadow [illegible] Land & Reservoir Co.

The gage is a vertical staff fastened to a juniper tree on the right bank.

Discharge measurements are made from the footbridge 75 feet above the gage.

The channel at the gage contains large bowlders and appears permanent. Both banks are high and will not overflow.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of Silver Creek near Markleeville, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-ft.* | 1911. | | *Feet.* | *Sec.-ft.* |
| Nov. 12 | H. D. McGlashan...... | 2.59 | 7 | July 30 | G. T. Peekema......... | 4.01 | 93 |
| | | | | Nov. 7 | J. E. Stewart.......... | 2.77 | 5.7 |
| 1911. | | | | | | | |
| Apr. 11 | J. E. Stewart.......... | 3.72 | 64 | 1912. | | | |
| June 23 | .....do................. | 5.06 | 233 | June 22 | H. J. Tompkins....... | 4.00 | 94 |

*Daily gage height, in feet, of Silver Creek near Markleeville, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | |
| 1 | | | | | | | | | | |
| 2 | | | | | | 4.20 | | | | |
| 3 | | 2.90 | 5.00 | 3.00 | | | | | | |
| 4 | | | | | 4.20 | | | | | |
| 5 | | | | | | 4.50 | | | | |
| 6 | | 2.81 | | | | | | | | |
| 7 | 2.85 | | 3.30 | 3.00 | 3.90 | | | | | |
| 8 | | | | | | | | | | |
| 9 | 2.87 | | | | | 4.32 | | | | |
| 10 | | 2.75 | 3.15 | 3.00 | | | 5.10 | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | 4.45 | | | | |
| 13 | 2.81 | | | | | | | 4.06 | | |
| 14 | | | 3.05 | 2.92 | 3.50 | | | | | |
| 15 | | | | | | | | | | |
| 16 | 2.95 | | | | | 4.20 | | | 3.40 | |
| 17 | 2.80 | 2.80 | 3.05 | 3.40 | | | | | 3.40 | |
| 18 | | 2.75 | | | 3.95 | | | | | |
| 19 | | | | | | 4.35 | 5.95 | | | |
| 20 | 2.88 | 4.00 | | | | | | | | |
| 21 | | | 3.00 | 3.90 | 3.95 | | | | | |
| 22 | | | | | | | | | | |
| 23 | 2.80 | | | | | 4.95 | 5.05 | | | |
| 24 | | 3.50 | 3.00 | 3.50 | | | | | | |
| 25 | | | | | 4.35 | | | | | |
| 26 | | | | | | 4.55 | | | | |
| 27 | 2.03 | 2.80 | | | | | | | 3.05 | |
| 28 | | | 3.00 | 3.90 | 4.20 | | | 4.00 | | 2.90 |
| 29 | | | | | | | | | 3.00 | 2.90 |
| 30 | 2.01 | | | | | | | 4.00 | | |
| 31 | | 6.00 | | 4.00 | | | | | | |

*Daily gage height, in feet, of Silver Creek near Markleeville, Cal., for 1910–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | | 2.80 | | | | | | | |
| 2 | | 2.20 | | 3.5 | | | | | |
| 3 | | | | | | 3.0 | | | |
| 4 | | | | | 3.0 | 3.0 | 3.0 | 3.4 | 5.0 |
| 5 | | 2.00 | | | | | | | |
| 6 | | 2.00 | | 3.5 | | 3.0 | | | |
| 7 | | | | | | | | | |
| 8 | | | | | 3.0 | | | 3.5 | |
| 9 | | | | | | | 3.3 | | |
| 10 | | | | 3.5 | | 3.0 | | | |
| 11 | 3.10 | | | | 3.0 | | | | |
| 12 | | | | | | | | 4.0 | |
| 13 | | | | 3.0 | | 3.0 | 3.0 | | 4.4 |
| 14 | | | | | | | | | |
| 15 | | | | | 3.0 | | | 5.0 | |
| 16 | | | | 3.0 | | 3.0 | | | |
| 17 | | | | | 3.0 | | 3.0 | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | 3.0 | | | 4.5 | |
| 21 | | | | 3.0 | | 3.0 | 3.0 | | |
| 22 | | | | | | | | | 4.0 |
| 23 | | | | 3.0 | | | | | |
| 24 | | | | | | | 3.3 | | |
| 25 | | | | | 3.0 | 3.0 | | 4.0 | |
| 26 | | | | | | 2.98 | | | |
| 27 | | | | 3.0 | 3.0 | | | | |
| 28 | | | | | | | | | |
| 29 | | | | 2.9 | | | 3.4 | 4.3 | |
| 30 | 2.80 | | | | | 2.9 | | | |
| 31 | 3.00 | | 3.00 | | | | | | |

NOTE.—Ice existed at the station during portions of January and February, 1912, but it is believed that only records for Jan. 1-11, 1912, were affected thereby.

*Daily discharge, in second-feet, of Silver Creek near Markleeville, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | |
| 1 | 14 | 16 | 533 | 19 | 108 | 120 | 180 | 106 | 88 | 14 |
| 2 | 14 | 16 | 412 | 19 | 124 | 120 | 222 | 114 | 85 | 14 |
| 3 | 14 | 16 | 292 | 19 | 140 | 137 | 264 | 122 | 81 | 12 |
| 4 | 14 | 15 | 227 | 19 | 120 | 155 | 306 | 130 | 78 | 12 |
| 5 | 14 | 14 | 163 | 19 | 108 | 172 | 348 | 125 | 74 | 12 |
| 6 | 14 | 13 | 98 | 19 | 95 | 158 | 390 | 120 | 71 | 12 |
| 7 | 14 | 13 | 33 | 19 | 82 | 144 | 373 | 115 | 67 | 12 |
| 8 | 14 | 12 | 30 | 19 | 70 | 130 | 356 | 110 | 64 | 12 |
| 9 | 15 | 12 | 28 | 19 | 80 | 138 | 339 | 105 | 60 | 12 |
| 10 | 15 | 12 | 25 | 19 | 90 | 130 | 322 | 100 | 57 | 12 |
| 11 | 14 | 12 | 24 | 19 | 79 | 146 | 350 | 95 | 53 | 12 |
| 12 | 13 | 12 | 23 | 18 | 68 | 162 | 377 | 98 | 50 | 12 |
| 13 | 13 | 12 | 22 | 17 | 57 | 151 | 405 | 100 | 46 | 11 |
| 14 | 15 | 12 | 21 | 17 | 46 | 141 | 432 | 105 | 43 | 11 |
| 15 | 16 | 12 | 21 | 24 | 56 | 131 | 460 | 110 | 40 | 11 |
| 16 | 18 | 13 | 21 | 32 | 67 | 120 | 504 | 108 | 36 | 11 |
| 17 | 13 | 13 | 21 | 39 | 77 | 128 | 547 | 106 | 36 | 11 |
| 18 | 14 | 12 | 20 | 50 | 88 | 136 | 590 | 104 | 34 | 11 |
| 19 | 14 | 52 | 20 | 61 | 99 | 144 | 633 | 102 | 32 | 11 |
| 20 | 15 | 93 | 19 | 72 | 110 | 178 | 551 | 101 | 30 | 11 |
| 21 | 14 | 56 | 19 | 82 | 88 | 211 | 470 | 100 | 28 | 11 |
| 22 | 14 | 20 | 19 | 70 | 102 | 245 | 388 | 99 | 26 | 11 |
| 23 | 13 | 33 | 19 | 58 | 116 | 278 | 307 | 98 | 24 | 10 |
| 24 | 10 | 46 | 19 | 46 | 130 | 246 | 271 | 96 | 22 | 10 |
| 25 | 7 | 35 | 19 | 55 | 144 | 214 | 235 | 95 | 20 | 10 |
| 26 | 4 | 24 | 19 | 64 | 170 | 182 | 198 | 94 | 18 | 10 |
| 27 | 1 | 13 | 19 | 73 | 145 | 181 | 162 | 93 | 16 | 10 |
| 28 | 1 | 15 | 19 | 82 | 120 | 180 | 126 | 92 | 15 | 10 |
| 29 | 1 | 228 | | 86 | 120 | 185 | 90 | 92 | 14 | 10 |
| 30 | 1 | 440 | | 90 | 120 | 190 | 98 | 92 | 14 | 10 |
| 31 | 8 | 653 | | 93 | | 185 | | 92 | 14 | |

*Daily discharge, in second-feet, of Silver Creek near Markleeville, Cal., for 1910–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 10 | 7 | ........ | 14 | 14 | 14 | 11 | 36 | 213 |
| 2 | 10 | 1 | ........ | 14 | 14 | 14 | 12 | 36 | 240 |
| 3 | 12 | ........ | ........ | 14 | 14 | 14 | 13 | 36 | 266 |
| 4 | 12 | ........ | ........ | 14 | 14 | 14 | 14 | 36 | 292 |
| 5 | 12 | 1 | ........ | 14 | 14 | 14 | 17 | 38 | 275 |
| 6 | 12 | 1 | ........ | 14 | 14 | 14 | 20 | 40 | 260 |
| 7 | 14 | ........ | ........ | 14 | 14 | 14 | 23 | 42 | 245 |
| 8 | 14 | ........ | ........ | 14 | 14 | 14 | 26 | 43 | 230 |
| 9 | 16 | ........ | ........ | 14 | 14 | 14 | 30 | 55 | 215 |
| 10 | 18 | ........ | ........ | 14 | 14 | 14 | 26 | 67 | 200 |
| 11 | 19 | ........ | ........ | 14 | 14 | 14 | 22 | 79 | 184 |
| 12 | 18 | ........ | ........ | 14 | 14 | 14 | 18 | 92 | 168 |
| 13 | 17 | ........ | ........ | 14 | 14 | 14 | 14 | 157 | 152 |
| 14 | 16 | ........ | ........ | 14 | 14 | 14 | 14 | 222 | 145 |
| 15 | 14 | ........ | ........ | 14 | 14 | 14 | 14 | 292 | 138 |
| 16 | 12 | ........ | ........ | 14 | 14 | 14 | 14 | 208 | 131 |
| 17 | 10 | ........ | ........ | 14 | 14 | 14 | 14 | 244 | 124 |
| 18 | 10 | ........ | ........ | 14 | 14 | 14 | 14 | 220 | 117 |
| 19 | 10 | ........ | ........ | 14 | 14 | 14 | 14 | 196 | 110 |
| 20 | 8 | ........ | ........ | 14 | 14 | 14 | 14 | 172 | 104 |
| 21 | 8 | ........ | ........ | 14 | 14 | 14 | 14 | 156 | 98 |
| 22 | 8 | ........ | ........ | 14 | 14 | 14 | 19 | 140 | 92 |
| 23 | 8 | ........ | ........ | 14 | 14 | 14 | 25 | 124 | 90 |
| 24 | 8 | ........ | ........ | 14 | 14 | 14 | 30 | 108 | 90 |
| 25 | 8 | ........ | ........ | 14 | 14 | 14 | 31 | 92 | 90 |
| 26 | 7 | ........ | ........ | 14 | 14 | 13 | 32 | 102 | 90 |
| 27 | 7 | ........ | ........ | 14 | 14 | 12 | 33 | 112 | 90 |
| 28 | 7 | ........ | ........ | 12 | 14 | 11 | 34 | 122 | 90 |
| 29 | 7 | ........ | ........ | 10 | 14 | 10 | 36 | 135 | 90 |
| 30 | 7 | ........ | ........ | 11 | ........ | 10 | 36 | 161 | 90 |
| 31 | 14 | ........ | 14 | 12 | ........ | 11 | ........ | 187 | ........ |

NOTE.—Daily discharge determined from rating curves, fairly well defined between 70 and 350 second-feet, applicable as follows: Nov. 12, 1910, to June 19, 1911, June 20, 1911, to June 30, 1912. Discharge interpolated or estimated from run-off of neighboring streams for days on which the gage was not read. Discharge estimated Jan. 1-11, 1912, on account of ice.

*Monthly discharge of Silver Creek near Markleeville, Cal., for 1910–1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1910-11. | | | | | |
| December | 18 | 1 | 11.7 | 719 | C. |
| January | 653 | 12 | 62.7 | 3,860 | C. |
| February | 533 | 19 | 78.8 | 4,380 | C. |
| March | 93 | 17 | 43.2 | 2,660 | B. |
| April | 170 | 46 | 101 | 6,010 | B. |
| May | 278 | 120 | 166 | 10,200 | B. |
| June | 633 | 90 | 343 | 20,400 | B. |
| July | 130 | 92 | 104 | 6,400 | C. |
| August | 88 | 14 | 43.1 | 2,650 | C. |
| September | 14 | 10 | 11.3 | 672 | D. |
| The period | .......... | .......... | .......... | 58,000 | |
| 1911-12. | | | | | |
| October | 19 | 7 | 11.4 | 701 | D. |
| November | .......... | .......... | 10.0 | 595 | D. |
| December | .......... | .......... | 8.0 | 492 | D. |
| January | 14 | 10 | 13.6 | 836 | C. |
| February | 14 | 14 | 14.0 | 805 | C. |
| March | 14 | 10 | 13.5 | 830 | C. |
| April | 36 | 11 | 21.1 | 1,260 | C. |
| May | 292 | 36 | 123 | 7,560 | B. |
| June | 292 | 90 | 157 | 9,340 | B. |
| The period | .......... | .......... | .......... | 22,400 | |

NOTE.—Values for November and December, 1911, are estimated.

## [illegible]

This station, which is located at the highway bridge above the mouth of Pleasant Valley Creek and three-fourths of a mile above Markleeville, was established November [illegible], 1911.

The gage is a vertical staff fastened to the left abutment of the bridge.

The bed of the stream is composed of gravel and small boulders.

At high stages discharge measurements are made from the bridge; low-stage measurements are made by wading.

Ice is present in the stream during the winter months.

Town ditch which heads above the gage furnishes water for irrigation and domestic use at Markleeville and in addition a small ditch diverts water for irrigation on the Hot Springs ranch.

The gage heights are furnished by the United States Forest Service.

*[illegible] near Markleeville, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1911. | | Feet. | Sec.-ft. |
| Nov. [illegible] | [illegible] | [illegible] | [illegible] |
| 1912. | | | |
| June [illegible] | [illegible] | [illegible] | 34 |

*[illegible] near Markleeville, Cal., for 1911-12.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | [illegible] | | |
| 2 | | | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 3 | | | | [illegible] | | [illegible] | [illegible] | |
| 4 | | | | | [illegible] | | [illegible] | |
| 5 | | | | [illegible] | [illegible] | [illegible] | | |
| 6 | | | | [illegible] | | | | |
| 7 | [illegible] | | | [illegible] | [illegible] | [illegible] | 6.2 | |
| 8 | | | | [illegible] | [illegible] | | | |
| 9 | | | | [illegible] | [illegible] | | [illegible] | |
| 10 | | | | [illegible] | | | 6.6 | |
| 11 | | | | [illegible] | [illegible] | [illegible] | 6.4 | |
| 12 | | [illegible] | [illegible] | [illegible] | | [illegible] | | |
| 13 | | | [illegible] | [illegible] | [illegible] | [illegible] | 6.05 | |
| 14 | | | | [illegible] | [illegible] | | [illegible] | |
| 15 | | [illegible] | | [illegible] | | [illegible] | 6.9 | [illegible] |
| 16 | | | [illegible] | [illegible] | [illegible] | [illegible] | 7.0 | |
| 17 | | | [illegible] | [illegible] | | [illegible] | 7.0 | |
| 18 | [illegible] | | [illegible] | 5.9 | [illegible] | | | 6.18 |
| 19 | | | [illegible] | [illegible] | [illegible] | | | |
| 20 | | | [illegible] | [illegible] | [illegible] | | | |
| 21 | | | | | 5.9 | | | |
| 22 | | | [illegible] | 5.9 | [illegible] | | | |
| 23 | | | [illegible] | [illegible] | [illegible] | | | |
| 24 | | [illegible] | 5.5 | [illegible] | | | | |
| 25 | [illegible] | | [illegible] | 5.9 | [illegible] | | | |
| 26 | | | [illegible] | [illegible] | | | | |
| 27 | | | 6.0 | | [illegible] | | | |
| 28 | | | | [illegible] | | | | |
| 29 | | | 6.0 | 5.8 | | | | 6.42 |
| 30 | | | | | [illegible] | | | |
| 31 | | | [illegible] | | | | | |

[illegible] most of January, 1912.

[1] Known locally as Hot Springs Creek.

## MARKLEEVILLE CREEK AT MARKLEEVILLE, CAL.

This gaging station, which is located at the highway bridge at Markleeville, below the mouth of Pleasant Valley Creek, in the SE. ¼ sec. 21, T. 10 N., R. 20 E., was established November 11, 1910.

Two ditches divert water from this creek. The upper one, which is small, irrigates the Hot Springs ranch; the lower, known as the Town ditch, was built in the early days to furnish water for domestic use at Markleeville, then a large mining camp. Later this ditch was rebuilt and extended so as to irrigate land below the town.

The gage is a vertical staff on the left abutment of the highway bridge.

Discharge measurements are made from the bridge.

The channel is composed of gravel and bowlders. The banks are high and not subject to overflow.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of Markleeville Creek at Markleeville, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-ft.* | 1911. | | *Feet.* | *Sec.-ft.* |
| Oct. 11 | H. D. McGlashan | 1.64 | 5.3 | July 30 | G. T. Peekema | 2.80 | 65 |
| | | | | Nov. 6 | J. E. Stewart | 1.88 | 9.4 |
| 1911. | | | | | | | |
| Apr. 11 | J. E. Stewart | 3.50 | 186 | 1912. | | | |
| June 22 | ....do | 5.05 | 761 | June 21 | H. J. Tompkins | 3.00 | 96 |

*Daily gage height, in feet, of Markleeville Creek at Markleeville, Cal., for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | | |
| 1 | | 1.81 | 2.20 | 3.50 | 2.50 | 3.75 | 4.0 | 4.2 | | | |
| 2 | | 1.83 | 2.11 | 3.30 | | | 4.0 | | | | 1.95 |
| 3 | | 2.70 | 2.08 | 3.28 | 2.50 | 4.02 | 4.1 | | 4.2 | | |
| 4 | | 2.10 | 2.18 | 3.05 | 2.50 | 3.90 | 4.4 | | | | |
| 5 | | 1.91 | 2.02 | | | 4.15 | 4.6 | 5.1 | | 2.7 | 1.88 |
| 6 | | 1.97 | 2.02 | 2.95 | 2.48 | 3.85 | 4.2 | | | | |
| 7 | | 2.03 | 2.01 | 2.90 | | 3.75 | 4.1 | | 4.05 | | |
| 8 | | 2.06 | 1.95 | 2.80 | | 3.7 | 4.0 | | | | |
| 9 | | 2.11 | 1.99 | 2.85 | 2.48 | 3.8 | 4.2 | | | | 2.25 |
| 10 | | 2.22 | 2.30 | 2.80 | 2.48 | 3.65 | 4.1 | 5.15 | | | |
| 11 | 1.64 | 2.41 | 2.20 | 2.78 | 2.48 | 3.5 | 4.2 | | 3.88 | | |
| 12 | 1.70 | 2.28 | 2.35 | | | 3.4 | 4.35 | | | 2.4 | |
| 13 | 1.70 | 2.21 | 2.70 | 2.68 | 2.53 | 3.9 | 4.3 | | | 2.3 | 2.05 |
| 14 | 1.70 | 2.06 | 3.00 | 2.75 | 2.50 | 3.3 | 4.3 | | | | 1.9 |
| 15 | 1.70 | 2.20 | | 2.75 | 2.53 | 3.28 | 3.95 | 5.3 | 3.85 | | 2.4 |
| 16 | 1.66 | 2.09 | | 2.95 | 2.55 | 3.3 | 3.9 | | | | |
| 17 | 1.63 | 1.98 | 3.15 | 2.80 | 2.70 | 3.35 | 3.8 | 5.2 | | | 2.32 |
| 18 | 1.68 | 2.25 | 3.00 | | 2.80 | 3.5 | 3.7 | | | | |
| 19 | 1.62 | 2.33 | 2.80 | 2.58 | | 3.7 | 4.05 | | 3.4 | | 2.3 |
| 20 | 1.60 | 2.01 | | 2.56 | 2.80 | 3.6 | 4.2 | 5.1 | | | |
| 21 | 1.59 | 2.02 | 3.25 | 2.60 | 2.85 | 3.6 | 4.3 | | | 2.15 | 2.18 |
| 22 | 1.62 | 2.07 | 2.65 | 2.78 | 2.90 | 3.95 | 4.7 | | 3.2 | 2.0 | 2.18 |
| 23 | 1.63 | 2.14 | 3.00 | 2.58 | 3.10 | 4.0 | 5.0 | 4.7 | | | |
| 24 | 1.86 | 1.99 | 2.65 | 2.55 | 3.18 | 4.05 | 5.2 | | 3.15 | | |
| 25 | 1.86 | | 2.50 | 2.58 | 3.30 | 4.2 | 4.55 | | | | 1.98 |
| 26 | 1.65 | 2.05 | | 2.30 | | 4.5 | 4.45 | 4.35 | 2.9 | 1.98 | |
| 27 | 1.93 | 2.32 | 2.44 | | 3.18 | 4.35 | 4.4 | 4.85 | 3.01 | | 1.92 |
| 28 | 1.83 | 2.30 | | 2.60 | 3.28 | 4.05 | | | | | |
| 29 | 1.81 | 2.35 | 2.75 | | 3.40 | 3.9 | 4.55 | | | | 1.92 |
| 30 | 1.81 | 2.01 | 4.80 | | | 3.95 | | 4.3 | 2.8 | | |
| 31 | | 2.10 | 4.20 | | 4.12 | | | | | 1.9 | |

*Daily gage height, in feet, of [illegible] Creek at [illegible], Cal., for 1911–12.*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | | | [illegible] | [illegible] | [illegible] | | [illegible] | | |
| 2 | | | | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 3 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 4 | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | | |
| 5 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 6 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 7 | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 8 | | | | [illegible] | [illegible] | [illegible] | | [illegible] | |
| 9 | | | | [illegible] | [illegible] | [illegible] | | [illegible] | |
| 10 | | | | [illegible] | [illegible] | [illegible] | | [illegible] | |
| 11 | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 12 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 13 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 14 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 15 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 17 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 18 | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | [illegible] | |
| 19 | | | | [illegible] | [illegible] | [illegible] | | | |
| 20 | | | | [illegible] | [illegible] | [illegible] | | | |
| 21 | | | | [illegible] | [illegible] | [illegible] | | | |
| 22 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | | |
| 23 | | | | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 24 | | | | [illegible] | [illegible] | [illegible] | | | |
| 25 | | [illegible] | | [illegible] | [illegible] | [illegible] | | | |
| 26 | | | | [illegible] | [illegible] | [illegible] | | | |
| 27 | | | | [illegible] | [illegible] | [illegible] | | | |
| 28 | | | | [illegible] | [illegible] | [illegible] | | | |
| 29 | | | | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 30 | | [illegible] | | [illegible] | | [illegible] | | | |
| 31 | [illegible] | | [illegible] | [illegible] | | [illegible] | | | |

NOTE.—Ice existed at this station during January, 1912, but it is believed that records for Jan. 1–4, 1912, only were affected thereby.

*Daily discharge, in second-feet, of [illegible] Creek at [illegible], Cal., for 1910–1911.*

| Day | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | |
| 1 | ....... | [illegible] | [illegible] | [illegible] | 44 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 13 |
| 2 | ....... | [illegible] | 30 | 148 | 44 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 14 |
| 3 | ....... | 18 | 19 | [illegible] | 44 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 13 |
| 4 | ....... | 30 | 24 | 102 | 44 | [illegible] | [illegible] | 640 | [illegible] | 52 | 12 |
| 5 | ....... | [illegible] | [illegible] | 86 | 44 | [illegible] | 540 | [illegible] | 300 | 60 | 11 |
| 6 | ....... | [illegible] | [illegible] | [illegible] | 43 | 362 | [illegible] | [illegible] | [illegible] | [illegible] | 15 |
| 7 | ....... | [illegible] | 16 | [illegible] | 43 | [illegible] | [illegible] | [illegible] | [illegible] | 54 | 20 |
| 8 | ....... | [illegible] | 14 | [illegible] | 43 | [illegible] | [illegible] | [illegible] | 302 | 50 | 24 |
| 9 | ....... | 30 | 16 | [illegible] | 43 | [illegible] | [illegible] | [illegible] | [illegible] | 47 | 28 |
| 10 | ....... | 35 | 31 | [illegible] | 43 | [illegible] | [illegible] | [illegible] | [illegible] | 44 | 26 |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | 43 | [illegible] | [illegible] | [illegible] | [illegible] | 40 | 23 |
| 12 | — | 30 | 34 | [illegible] | 44 | [illegible] | 421 | [illegible] | [illegible] | 37 | 21 |
| 13 | [illegible] | 35 | 40 | [illegible] | 46 | [illegible] | [illegible] | [illegible] | [illegible] | 31 | 18 |
| 14 | — | [illegible] | 45 | [illegible] | 44 | 140 | [illegible] | [illegible] | [illegible] | 30 | 12 |
| 15 | [illegible] | [illegible] | 102 | [illegible] | 46 | [illegible] | [illegible] | [illegible] | [illegible] | 29 | 37 |
| 16 | 4.2 | 30 | 100 | [illegible] | 48 | 140 | [illegible] | [illegible] | [illegible] | 28 | 34 |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | 50 | 140 | [illegible] | [illegible] | [illegible] | 26 | 32 |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | 70 | [illegible] | [illegible] | [illegible] | 154 | 25 | [illegible] |
| 19 | [illegible] | [illegible] | 70 | 50 | 70 | [illegible] | [illegible] | [illegible] | 156 | 24 | 31 |
| 20 | [illegible] | 16 | 101 | 49 | 70 | 300 | [illegible] | 736 | [illegible] | 23 | 25 |
| 21 | 4.9 | [illegible] | [illegible] | 52 | 75 | 300 | 422 | 725 | 134 | 22 | 24 |
| 22 | [illegible] | 19 | [illegible] | [illegible] | 82 | 300 | [illegible] | [illegible] | 123 | 16 | 24 |
| 23 | [illegible] | 22 | 95 | 50 | 106 | 305 | 740 | 585 | 130 | 16 | 21 |
| 24 | [illegible] | 16 | [illegible] | 46 | 130 | [illegible] | [illegible] | 574 | 116 | 16 | 18 |
| 25 | [illegible] | [illegible] | 44 | 50 | 140 | 372 | 518 | 483 | 99 | 15 | 15 |
| 26 | 4 | 19 | 42 | 31 | 150 | 486 | 474 | 432 | 92 | 15 | 14 |
| 27 | 13 | 32 | 40 | 42 | 130 | 452 | 432 | 690 | 95 | 15 | 13 |
| 28 | [illegible] | 31 | 52 | 32 | [illegible] | 322 | [illegible] | 578 | 88 | 14 | 13 |
| 29 | [illegible] | 34 | 85 | ....... | [illegible] | 275 | 518 | 496 | 79 | 14 | 13 |
| 30 | [illegible] | [illegible] | [illegible] | ....... | 252 | 290 | 470 | 412 | 70 | 13 | 13 |
| 31 | ....... | 20 | 372 | ....... | 145 | ....... | 421 | ....... | 70 | 12 | ....... |

*Daily discharge, in second-feet, of Markleeville Creek at Markleeville, Cal., for 1910–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 13 | 13 | 20 | 15 | 18 | 16 | 21 | ........ | ........ |
| 2 | 12 | 12 | 20 | 15 | 20 | 15 | 26 | ........ | ........ |
| 3 | 12 | 12 | 20 | 15 | 20 | 16 | 30 | 44 | ........ |
| 4 | 12 | 12 | 22 | 15 | 20 | 16 | 31 | 44 | ........ |
| 5 | 12 | 12 | 22 | 15 | 16 | 16 | 32 | 48 | ........ |
| 6 | 13 | 13 | 22 | 15 | 16 | 20 | 31 | 48 | ........ |
| 7 | 13 | 13 | 22 | 16 | 16 | 16 | 31 | 60 | ........ |
| 8 | 13 | 14 | 24 | 16 | 17 | 16 | 34 | 95 | ........ |
| 9 | 12 | 15 | 24 | 16 | 17 | 16 | 37 | 140 | ........ |
| 10 | 12 | 16 | 24 | 18 | 17 | 16 | 40 | 158 | ........ |
| 11 | 10 | 16 | 26 | 16 | 19 | 16 | 44 | 158 | ........ |
| 12 | 10 | 15 | 26 | 16 | 16 | 16 | 37 | 179 | ........ |
| 13 | 9 | 14 | 22 | 16 | 16 | 16 | 37 | 200 | ........ |
| 14 | 9 | 13 | 21 | 16 | 18 | 18 | 37 | 222 | ........ |
| 15 | 9 | 12 | 20 | 16 | 17 | 16 | 37 | 290 | 116 |
| 16 | 9 | 11 | 15 | 17 | 17 | 16 | 38 | 305 | 110 |
| 17 | 9 | 10 | 15 | 15 | 18 | 17 | 38 | 338 | 103 |
| 18 | 8.6 | 9 | 15 | 15 | 20 | 17 | ........ | 338 | 97 |
| 19 | 9 | 9 | 15 | 14 | 17 | 17 | ........ | ........ | 91 |
| 20 | 12 | 10 | 15 | 15 | 20 | 18 | ........ | ........ | 84 |
| 21 | 14 | 10 | 15 | 16 | 18 | 16 | ........ | ........ | 77 |
| 22 | 15 | 11 | 15 | 16 | 18 | 17 | ........ | ........ | 71 |
| 23 | 15 | 12 | 15 | 16 | 16 | 17 | ........ | ........ | 65 |
| 24 | 15 | 13 | 15 | 16 | 16 | 18 | ........ | ........ | 67 |
| 25 | 15 | 14 | 15 | 16 | 18 | 18 | ........ | ........ | 69 |
| 26 | 14 | 14 | 15 | 20 | 20 | 20 | ........ | ........ | 71 |
| 27 | 14 | 14 | 15 | 20 | 16 | 18 | ........ | ........ | 73 |
| 28 | 14 | 14 | 15 | 20 | 16 | 20 | ........ | ........ | 75 |
| 29 | 13 | 15 | 15 | 20 | 16 | 21 | ........ | ........ | 77 |
| 30 | 13 | 15 | 15 | 20 | ........ | 21 | ........ | ........ | 75 |
| 31 | 13 | ........ | 15 | 19 | ........ | 21 | ........ | ........ | ........ |

NOTE.—Daily discharge determined from rating curves applicable as follows: Nov. 10, 1910, to June 30, 1912, fairly well defined. Discharge interpolated or estimated from run-off of adjacent streams for days on which the gage was not read. Discharge estimated Dec. 16, 1911, to Jan. 6, 1912, on account of ice.

*Monthly discharge of Markleeville Creek at Markleeville, Cal., for 1910–1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1910-11. | | | | | |
| November 11-30 | 13 | 4.9 | 7.4 | 294 | C. |
| December | 60 | 9.3 | 22.5 | 1,380 | C. |
| January | 635 | 14 | 83.7 | 5,150 | C. |
| February | 178 | 31 | 73.8 | 4,100 | C. |
| March | 345 | 43 | 85.3 | 5,240 | B. |
| April | 495 | 137 | 257 | 15,300 | A. |
| May | 860 | 222 | 418 | 25,700 | A. |
| June | 915 | 372 | 699 | 41,600 | A. |
| July | 390 | 70 | 217 | 13,300 | B. |
| August | 68 | 12 | 33.3 | 2,050 | B. |
| September | 37 | 11 | 20.4 | 1,210 | B. |
| The period | ........ | ........ | ........ | 115,000 | |
| 1911-12. | | | | | |
| October | 15 | 8.6 | 12.1 | 744 | C. |
| November | 16 | 9 | 12.8 | 762 | C. |
| December | 26 | ........ | 18.5 | 1,140 | C. |
| January | 20 | 14 | 16.5 | 1,010 | B. |
| February | 20 | 16 | 17.6 | 1,010 | B. |
| March | 21 | 15 | 17.3 | 1,060 | B. |
| April 1-17 | 44 | 21 | 34.2 | 1,150 | B. |
| May 3-18 | 338 | 44 | 167 | 5,300 | B. |
| June 15-30 | 116 | 65 | 82.6 | 2,620 | B. |

## PLEASANT VALLEY CREEK AT MARKLEEVILLE, CAL.

Pleasant Valley Creek, a tributary of Markleeville Creek, rises in Alpine County, Cal., on the east slope of the Sierra Nevada, near the summit of the divide separating Carson River waters from those of the Sacramento.

The gaging station, which is located at a footbridge 300 feet above the mouth of the creek and about three-fourths of a mile southwest of Markleeville, in the NW. ¼ sec. 28, T. 10 N., R. 20 E., was established November 11, 1910, and discontinued January 11, 1913.

Three irrigation ditches divert water from this stream. Two of these ditches irrigate about 300 acres of land and the return water enters the creek above the gage; the third heads about half a mile above the mouth and was originally constructed for use in placer mining along the East Carson River below Hangman's Bridge but is now used for irrigation near the mouth of Markleeville Creek.

Storage reservoirs are partly developed by the Alpine Land & Reservoir Co. at Upper and Lower Sunset lakes, Tamarack Lake, Summit Lake, Raymond Lake, and Wet Meadows.

The gage is a vertical staff fastened to a cottonwood tree on the left bank, 25 feet above the footbridge.

At low and medium stages discharge measurements are made by wading; high-stage measurements are made from the footbridge.

A riffle, composed of large bowlders, is just below the gage and acts as a permanent control. The stream is rapid and the bed is rough.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of Pleasant Valley Creek at Markleeville, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | Feet. | Sec.-ft. | 1911. | | Feet. | Sec.-ft. |
| Nov. 11 | H. D. McGlashan | 2.31 | 4.5 | July 30 | G. T. Pechman | 3.51 | 49 |
| | | | | Nov. 6 | J. E. Stewart | 2.92 | 4.8 |
| 1911. | | | | 1912. | | | |
| Apr. 12 | J. E. Stewart | 3.74 | 92 | June 21 | do | 3.60 | 45 |
| June 22 | do | 5.04 | 331 | | | | |

*Daily gage height, in feet, of Pleasant Valley Creek at Markleeville, Cal., for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1910–11.** | | | | | | | | | | | |
| 1 | | 3.04 | 3.10 | 4.20 | 3.40 | 4.20 | 4.40 | 4.55 | | | |
| 2 | | 3.04 | 2.90 | 4.05 | | | 4.40 | | | | 2.80 |
| 3 | | 3.20 | 3.01 | 4.04 | 3.40 | 4.40 | 4.45 | | 4.40 | | |
| 4 | | 3.10 | 3.00 | 3.90 | 3.40 | 4.20 | 4.95 | | | | |
| 5 | | 2.98 | 3.03 | | | 4.20 | 5.20 | 5.20 | | 3.40 | 2.75 |
| 6 | | 3.07 | 3.08 | 3.75 | 3.40 | 4.10 | 4.80 | | | | |
| 7 | | 3.10 | 3.05 | 3.75 | | 4.12 | 4.50 | | 4.25 | | |
| 8 | | 3.12 | 3.50 | 3.78 | | 4.10 | 4.50 | | | | |
| 9 | | 3.04 | 3.50 | 3.75 | 3.40 | 4.20 | 4.55 | | | | 3.20 |
| 10 | | 3.18 | 3.10 | 3.65 | 3.40 | 4.00 | 4.60 | 5.40 | | | |
| 11 | 2.91 | 3.20 | 3.07 | 3.65 | 3.40 | 4.00 | 4.80 | | 4.20 | | |
| 12 | 2.91 | 3.23 | 2.20 | | | 3.95 | 4.80 | | | 3.20 | |
| 13 | | 3.19 | | 3.65 | 3.40 | 3.80 | 4.60 | 5.45 | | | |
| 14 | 2.93 | 3.10 | 2.70 | 3.60 | 3.40 | 3.90 | 4.60 | | | 3.00 | 2.95 |
| 15 | | 3.11 | | 3.53 | 3.27 | 3.00 | 4.40 | | 4.26 | | 3.20 |
| 16 | 2.93 | 3.12 | | 3.65 | 3.20 | 3.95 | 4.20 | | | | |
| 17 | 2.92 | 3.10 | 3.30 | 3.55 | 3.41 | 3.95 | 4.25 | 5.50 | | | 3.20 |
| 18 | 2.94 | 3.08 | 3.00 | | 3.45 | 4.00 | 4.20 | | | | |
| 19 | 2.92 | 3.10 | 3.20 | 3.50 | | 4.28 | 4.52 | | 4.00 | | 3.28 |
| 20 | 2.90 | 3.10 | | 3.48 | 3.80 | 4.00 | 4.60 | 5.26 | | | |
| 21 | 2.90 | 3.12 | 3.20 | 3.50 | 3.50 | 4.06 | 5.01 | | | | |
| 22 | 2.91 | 3.10 | | 3.50 | 3.53 | 4.06 | 5.40 | | 3.25 | 3.00 | 3.15 |
| 23 | 2.92 | 3.07 | 3.27 | 3.45 | 3.70 | 4.26 | 5.25 | | | | |
| 24 | 3.00 | 3.10 | 3.43 | 3.40 | 3.78 | 4.55 | 5.45 | | 3.80 | | |
| 25 | 2.97 | | 3.30 | 3.40 | 3.80 | 4.80 | 5.00 | | 3.60 | | 3.00 |
| 26 | 2.93 | 3.05 | 3.25 | 3.70 | | 5.00 | 4.95 | 4.50 | | 2.98 | |
| 27 | 2.91 | 3.08 | 3.20 | | 3.80 | 4.70 | | | | | 2.92 |
| 28 | 3.04 | 3.02 | | 3.40 | 3.85 | 4.50 | | | | | |
| 29 | 3.04 | 3.01 | | | 3.90 | 4.20 | 4.95 | | | | 2.91 |
| 30 | 3.04 | 3.01 | | | | 4.20 | | 4.10 | 3.50 | | |
| 31 | | 3.01 | | | 4.12 | | 4.65 | | | 2.85 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Day. | Oct. | Nov. | Dec. | Jan. |
|---|---|---|---|---|---|---|---|---|---|
| **1911–12.** | | | | | **1911–12.** | | | | |
| 1 | | | | | 16 | | | | |
| 2 | | | | | 17 | | | | |
| 3 | | | | | 18 | 2.90 | | | |
| 4 | 2.45 | 2.00 | | | 19 | | | | |
| 5 | | | | 3.02 | 20 | | | | |
| 6 | | | | 3.00 | 21 | 2.80 | | | |
| 7 | 2.50 | 2.92 | | | 22 | | | | |
| 8 | | | | 2.94 | 23 | | | | |
| 9 | | | | 2.98 | 24 | | | | |
| 10 | | | | 3.00 | 25 | | | | |
| 11 | | 2.95 | | 3.00 | 26 | | | | |
| 12 | | | | | 27 | | | | |
| 13 | | | | | 28 | | | | |
| 14 | | | | | 29 | | | | |
| 15 | | | | | 30 | | | | |
| | | | | | 31 | 2.75 | | | |

*Daily discharge, in second-feet, of Pleasant Valley Creek at Markleeville, Cal., for 1910–11*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | | |
| 1 | ...... | 12 | 15 | 126 | 34 | 126 | 164 | 195 | 128 | 39 | 4.[illegible] |
| 2 | ...... | 12 | 6.0 | 108 | 34 | 145 | 164 | 255 | 146 | 38 | 4.[illegible] |
| 3 | ...... | 20 | 10 | 102 | 34 | 164 | 174 | 315 | 164 | 36 | 4.[illegible] |
| 4 | ...... | 15 | 10 | 84 | 34 | 144 | 306 | 375 | 162 | 35 | 3.[illegible] |
| 5 | ...... | 9.2 | 12 | 75 | 34 | 144 | 435 | 435 | 150 | 34 | 3.[illegible] |
| 6 | ...... | 14 | 14 | 66 | 34 | 110 | 206 | 450 | 156 | 32 | 8.[illegible] |
| 7 | ...... | 15 | 12 | 66 | 34 | 113 | 184 | 435 | 154 | 30 | 12 |
| 8 | ...... | 16 | 42 | 70 | 34 | 110 | 184 | 420 | 147 | 28 | 16 |
| 9 | ...... | 12 | 42 | 66 | 34 | 126 | 195 | 450 | 140 | 26 | 20 |
| 10 | ...... | 19 | 15 | 55 | 34 | 96 | 184 | 480 | 133 | 24 | 17 |
| 11 | 6.4 | 26 | 14 | 55 | 34 | 96 | 206 | 487 | 126 | 22 | 14 |
| 12 | 6.4 | 22 | 0.5 | 55 | 34 | 90 | 260 | 495 | 128 | 20 | 11 |
| 13 | 6.8 | 20 | 1.8 | 55 | 34 | 84 | 206 | 502 | 130 | 15 | 8.[illegible] |
| 14 | 7.2 | 15 | 3.0 | 50 | 34 | 84 | 206 | 518 | 132 | 10 | 5.[illegible] |
| 15 | 7.2 | 16 | 10 | 44 | 32 | 84 | 164 | 534 | 135 | 10 | 26 |
| 16 | 7.2 | 16 | 18 | 55 | 33 | 90 | 126 | 550 | 126 | 10 | 26 |
| 17 | 6.8 | 15 | 26 | 46 | 35 | 90 | 135 | 525 | 116 | 10 | 26 |
| 18 | 7.6 | 14 | 30 | 44 | 38 | 96 | 126 | 502 | 106 | 10 | 26 |
| 19 | 6.8 | 15 | 20 | 42 | 40 | 141 | 188 | 480 | 96 | 10 | 25 |
| 20 | 6.0 | 15 | 35 | 40 | 42 | 96 | 206 | 458 | 74 | 10 | 22 |
| 21 | 6.0 | 16 | 26 | 42 | 42 | 108 | 326 | 413 | 52 | 10 | 20 |
| 22 | 6.4 | 15 | 25 | 42 | 44 | 103 | 480 | 368 | 30 | 10 | 18 |
| 23 | 6.8 | 14 | 24 | 38 | 60 | 154 | 458 | 322 | 51 | 10 | 15 |
| 24 | 10 | 15 | 36 | 34 | 70 | 195 | 502 | 276 | 72 | 10 | 12 |
| 25 | 8.8 | 14 | 26 | 34 | 72 | 260 | 322 | 230 | 50 | 10 | 10 |
| 26 | 7.2 | 12 | 28 | 60 | 72 | 322 | 306 | 184 | 48 | 9.2 | 8.4 |
| 27 | 6.4 | 14 | 20 | 47 | 72 | 232 | 333 | 165 | 46 | 9.0 | 6.5 |
| 28 | 12 | 11 | 86 | 34 | 78 | 184 | 360 | 147 | 44 | 8.0 | 6.6 |
| 29 | 12 | 10 | 154 | ...... | 84 | 126 | 306 | 128 | 43 | 7.0 | 6.4 |
| 30 | 12 | 10 | 220 | ...... | 98 | 126 | 262 | 110 | 42 | 6.0 | 6.0 |
| 31 | ...... | 10 | 178 | ...... | 113 | ...... | 219 | ...... | 40 | 5.0 | ...... |

| Day. | Oct. | Nov. | Day. | Oct. | Nov. | Day. | Oct. | Nov. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | 5.0 | 3.1 | 11 | 3.1 | 8.0 | 21 | 4.0 | ...... |
| 2 | 4.0 | 2.8 | 12 | 3.5 | ...... | 22 | 4.0 | ...... |
| 3 | 3.0 | 2.4 | 13 | 3.9 | ...... | 23 | 4.0 | ...... |
| 4 | 1.2 | 2.0 | 14 | 4.3 | ...... | 24 | 4.0 | ...... |
| 5 | 1.3 | 3.6 | 15 | 4.7 | ...... | 25 | 4.0 | ...... |
| 6 | 1.4 | 5.2 | 16 | 5.1 | ...... | 26 | 4.0 | ...... |
| 7 | 1.5 | 6.8 | 17 | 5.6 | ...... | 27 | 3.5 | ...... |
| 8 | 1.9 | 7.1 | 18 | 6.0 | ...... | 28 | 3.5 | ...... |
| 9 | 2.3 | 7.4 | 19 | 5.0 | ...... | 29 | 3.5 | ...... |
| 10 | 2.7 | 7.7 | 20 | 5.0 | ...... | 30 | 3.5 | ...... |
| | | | | | | 31 | 3.5 | ...... |

NOTE. Daily discharge determined from a fairly well defined rating curve. Discharge interpolated or estimated from run-off of neighboring streams for days on which the gage was not read.

*Monthly discharge of Pleasant Valley Creek at Markleeville, Cal., for 1910–11.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1910–11.** | | | | | |
| November 11–30 | 12 | 6.0 | 7.80 | 309 | C. |
| December | 26 | 9.2 | 14.8 | 910 | C. |
| January | 220 | .5 | 36.4 | 2,240 | C. |
| February | 126 | 34 | 58.2 | 3,230 | C. |
| March | 113 | 32 | 48.4 | 2,980 | B. |
| April | 322 | 84 | 134 | 7,970 | B. |
| May | 502 | 126 | 255 | 15,700 | A. |
| June | 550 | 110 | 373 | 22,200 | A. |
| July | 164 | 40 | 102 | 6,270 | B. |
| August | 39 | 5.0 | 17.5 | 1,080 | C. |
| September | 26 | 3.5 | 13.0 | 774 | C. |
| The period | | | | 63,700 | |
| **1911.** | | | | | |
| October | 6.0 | 1.2 | 3.61 | 222 | C. |
| November 1–11 | 8.0 | 2.0 | 5.10 | 111 | C. |

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made on creeks and ditches in the Carson River basin:

*Miscellaneous measurements of creeks in Carson River drainage basin in California.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Aug. 6, 1902 | Bruns Creek | C. V. Taylor | Mouth of canyon | 2.84 |
| Sept. 9, 1902 | do | L. L. Richard | do | 3.48 |
| Apr. 28, 1903 | Fairview Creek | A. H. Schadler | Above all diversions | 2.8 |
| May 20, 1903 | do | do | do | 4.2 |
| July 9, 1903 | do | do | do | 3.3 |
| July 24, 1903 | do | W. B. Harrington | do | 3.3 |
| Aug. 5, 1903 | do | do | do | 2.2 |
| Sept. 9, 1903 | do | do | do | 3.1 |
| Aug. 6, 1903 | Fredericksburg Creek | do | do | 4.2 |
| Sept. 9, 1903 | do | do | do | 2.9 |
| Apr. 29, 1903 | Harveys Creek | A. H. Schadler | do | 2.4 |
| May 21, 1903 | do | do | do | 2.2 |
| June 24, 1903 | do | do | do | 2.8 |
| July 18, 1903 | do | do | do | .2 |
| July 23, 1903 | do | W. B. Harrington | do | 1.3 |
| Aug. 5, 1903 | do | do | do | 1.8 |
| Sept. 9, 1903 | do | do | do | .4 |
| Aug. 6, 1902 | Hawkins Creek | C. V. Taylor | ½ mile above Hawkins's house. | 1.18 |
| Sept. 9, 1902 | do | L. L. Richard | do | 1.10 |
| July 23, 1903 | do | W. B. Harrington | Above all diversions | .8 |
| Aug. 5, 1903 | do | do | do | 1.0 |
| Sept. 9, 1903 | do | do | do | .9 |
| Aug. 6, 1902 | Indian Creek | C. V. Taylor | Head Cohn and Harvey ditch. | .72 |
| Aug. 5, 1902 | Long Valley Creek | do | Diamond Valley | 4.12 |
| Aug. 6, 1902 | Petersons Creek | do | Near old sawmill | 1.27 |
| Sept. 9, 1902 | do | L. L. Richard | Above Cohn's meadow | .41 |
| June 24, 1903 | Creek above Markleeville | A. H. Schadler | | .4 |

*Miscellaneous measurements* [illegible] *California* [illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## WALKER LAKE BASIN.

### WEST WALKER RIVER NEAR COLEVILLE, CAL. (UPPER STATION).

This station, which was established October 5, 1902, to determine the total flow of the river above all diversions and to obtain for the Reclamation Service reliable data concerning storage and irrigation opportunities, was discontinued July 31, 1908. The data were also used by the Nevada State engineer in adjusting water rights in Smith and Antelope valleys.

The cable was located about 1 mile east of the point where the main road from Topaz to Bridgeport crosses Lost Canyon Creek and is 600 feet from the road. The gage was about half a mile above the cable.

The gage datum remained unchanged during the continuance of the station. The channel is permanent, the flow is apparently unaffected by ice or artificial control, and the record is good.

*Discharge measurements of West Walker River near Coleville, Cal., in 1902–1908.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1902. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| July 25 | L. H. Taylor | ........ | 331 | May 3 | J. L. Brambila | 2.50 | 349 |
| Sept. 23 | D. W. Hays | ........ | 82 | 11 | .....do | 2.15 | 232 |
| Oct. 4 | .....do | ........ | 70 | 24 | .....do | 3.45 | 846 |
| | | | | June 6 | .....do | 3.10 | 657 |
| 1903. | | | | 29 | .....do | 3.20 | 694 |
| Apr. 8 | D. W. Hays | 2.00 | 225 | July 8 | .....do | 3.10 | 645 |
| 30 | I. W. Huffaker | 2.65 | 476 | 24 | .....do | 2.00 | 202 |
| June 8 | .....do | 4.00 | 1,887 | 25 | .....do | 2.30 | 333 |
| July 14 | .....do | 2.70 | 451 | Aug. 30 | W. A. Wolf | 1.30 | 81 |
| 28 | .....do | 2.20 | 260 | | | | |
| Aug. 7 | .....do | 1.85 | 184 | 1906. | | | |
| Sept. 29 | W. A. Wolf | 1.08 | 65 | May 11 | M. B. Kennedy | 4.10 | 1,790 |
| | | | | 16 | .....do | 3.50 | 1,220 |
| 1904. | | | | June 8 | .....do | 3.30 | 960 |
| Mar. 23 | L. A. Wolley | 1.80 | 163 | 13 | .....do | 4.70 | 2,150 |
| May 4 | R. A. Craig | 2.32 | 345 | July 19 | .....do | 4.15 | 1,890 |
| July 5 | J. T. Shaw | 3.82 | 1,022 | Aug. 19 | .....do | 3.00 | 627 |
| 13 | .....do | 3.29 | 705 | | | | |
| 20 | .....do | 3.38 | 847 | 1907. | | | |
| 27 | .....do | 3.18 | 707 | June 11 | E. A. Porter | 4.20 | 1,570 |
| Aug. 3 | .....do | 2.79 | 526 | July 10 | .....do | 4.75 | 1,980 |
| 10 | .....do | 2.62 | 459 | Aug. 4 | .....do | 3.65 | 1,000 |
| 17 | .....do | 2.62 | 480 | 25 | .....do | 2.80 | 440 |
| 24 | .....do | 2.21 | 267 | | | | |
| Sept. 8 | .....do | 1.65 | 145 | 1908. | | | |
| Oct. 17 | .....do | 2.05 | 237 | Mar. 28 | E. A. Porter | 1.80 | 170 |
| | | | | Apr. 17 | .....do | 2.60 | 359 |

*Daily gage height, in feet, of West Walker River near Coleville, Cal., for 1902–1908.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902-3. | | | | | | | | | | | | |
| 1 | ...... | 1.3 | 1.3 | 1.2 | 1.4 | 1.2 | 1.6 | 2.7 | 4.1 | 3.5 | 2.0 | 1.3 |
| 2 | ...... | 1.2 | 1.2 | 1.4 | 1.3 | 1.3 | 1.7 | 2.8 | 4.0 | 3.3 | 2.0 | 1.3 |
| 3 | ...... | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.7 | 3.0 | 3.9 | 3.0 | 1.9 | 1.3 |
| 4 | ...... | 1.2 | 1.3 | 1.1 | 1.1 | 1.2 | 1.6 | 3.1 | 3.8 | 3.1 | 1.9 | 1.3 |
| 5 | 1.1 | 1.2 | 1.4 | 1.3 | 1.0 | 1.2 | 1.5 | 3.2 | 3.9 | 3.0 | 1.8 | 1.3 |
| 6 | 1.1 | 1.2 | 1.3 | 1.3 | 1.2 | 1.3 | 1.5 | 3.2 | 4.0 | 3.0 | 1.8 | 1.3 |
| 7 | 1.1 | 1.2 | 1.3 | 1.2 | 1.3 | 1.1 | 1.7 | 3.4 | 3.9 | 2.9 | 1.7 | 1.2 |
| 8 | 1.1 | 1.2 | 1.3 | 1.1 | 1.4 | 1.2 | 1.9 | 3.4 | 4.0 | 2.5 | 1.7 | 1.2 |
| 9 | 1.0 | 1.2 | 1.3 | 1.0 | 1.3 | 1.2 | 2.2 | 3.3 | 4.1 | 2.5 | 1.9 | 1.2 |
| 10 | 1.0 | 1.5 | 1.3 | 1.0 | 1.2 | 1.3 | 2.3 | 3.5 | 4.0 | 2.5 | 1.8 | 1.2 |
| 11 | 1.0 | 1.5 | 1.2 | 1.0 | 1.2 | 1.1 | 2.3 | 3.7 | 3.9 | 2.5 | 1.8 | 1.2 |
| 12 | 1.0 | 1.5 | 1.1 | 1.0 | 1.3 | 1.1 | 1.9 | 3.8 | 3.8 | 2.4 | 1.8 | 1.2 |
| 13 | 1.0 | 1.2 | 1.0 | 1.0 | 1.2 | 1.2 | 2.0 | 4.0 | 3.9 | 2.3 | 1.7 | 1.2 |
| 14 | 1.0 | 1.2 | 1.3 | 1.0 | 1.3 | 1.3 | 1.6 | 3.6 | 3.8 | 2.3 | 1.7 | 1.2 |
| 15 | 1.0 | 1.2 | 1.2 | 1.0 | 1.3 | 1.3 | 1.7 | 3.5 | 3.7 | 2.2 | 1.7 | 1.2 |
| 16 | 1.0 | 1.3 | 1.3 | 1.0 | 1.2 | 1.4 | 1.8 | 3.4 | 3.7 | 2.3 | 1.6 | 1.2 |
| 17 | 1.0 | 1.2 | 1.1 | 1.1 | 1.3 | 1.3 | 1.8 | 3.3 | 3.3 | 2.3 | 1.6 | 1.2 |
| 18 | 1.0 | 1.3 | 1.0 | 1.0 | 1.3 | 1.3 | 1.9 | 3.1 | 3.2 | 2.3 | 1.6 | 1.2 |
| 19 | 1.0 | 1.2 | 1.0 | 1.0 | 1.2 | 1.2 | 1.8 | 2.9 | 3.5 | 2.2 | 1.6 | 1.2 |
| 20 | 1.0 | 1.3 | 1.0 | 1.1 | 1.2 | 1.3 | 1.8 | 2.8 | 3.6 | 2.3 | 1.6 | 1.2 |
| 21 | 1.0 | 1.4 | 1.2 | 1.0 | 1.1 | 1.4 | 1.9 | 2.5 | 3.6 | 2.4 | 1.6 | 1.2 |
| 22 | 1.0 | 1.4 | 1.2 | 1.0 | 1.2 | 1.3 | 2.1 | 2.5 | 3.6 | 2.4 | 1.6 | 1.2 |
| 23 | 1.0 | 1.3 | 1.2 | 1.2 | 1.2 | 1.3 | 2.5 | 2.5 | 3.5 | 2.4 | 1.6 | 1.1 |
| 24 | 1.2 | 1.2 | 1.0 | 1.0 | 1.3 | 1.3 | 2.7 | 2.4 | 3.6 | 2.2 | 1.5 | 1.1 |
| 25 | 1.2 | 1.2 | 1.3 | 1.1 | 1.3 | 1.4 | 2.5 | 2.4 | 3.7 | 2.1 | 1.5 | 1.1 |
| 26 | 1.2 | 1.3 | 1.3 | 1.2 | 1.2 | 1.6 | 2.7 | 2.4 | 3.7 | 2.1 | 1.4 | 1.1 |
| 27 | 1.2 | 1.3 | 1.1 | 1.4 | 1.2 | 1.6 | 2.5 | 2.9 | 3.7 | 2.1 | 1.4 | 1.2 |
| 28 | 1.3 | 1.1 | 1.0 | 1.1 | 1.3 | 2.3 | 2.6 | 3.2 | 3.6 | 2.1 | 1.4 | 1.1 |
| 29 | 1.3 | 1.3 | 1.1 | 1.0 | ...... | 2.2 | 2.7 | 3.4 | 3.6 | 2.1 | 1.4 | 1.1 |
| 30 | 1.3 | 1.3 | 1.2 | 1.0 | ...... | 2.1 | 2.5 | 3.9 | 3.5 | 2.0 | 1.4 | 1.1 |
| 31 | 1.3 | ...... | 1.2 | 1.3 | ...... | 1.7 | ...... | 4.0 | ...... | 1.9 | 1.3 | ...... |
| 1903-4. | | | | | | | | | | | | |
| 1 | 1.1 | 1.1 | 1.2 | 1.1 | 1.0 | 1.7 | 2.0 | 2.0 | 3.7 | 3.7 | 2.7 | 1.9 |
| 2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.7 | 2.0 | 2.1 | 3.4 | 3.7 | 2.5 | 1.8 |
| 3 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.7 | 2.0 | 2.2 | 3.7 | 3.5 | 2.5 | 1.8 |
| 4 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.7 | 1.9 | 2.2 | 4.0 | 3.5 | 2.5 | 1.8 |
| 5 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.7 | 1.8 | 2.3 | 4.0 | 3.5 | 2.6 | 1.8 |
| 6 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.7 | 1.9 | 2.5 | 4.3 | 3.5 | 2.7 | 1.8 |
| 7 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.8 | 2.0 | 3.0 | 4.2 | 3.6 | 2.6 | 1.8 |
| 8 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 2.0 | 2.6 | 3.3 | 4.0 | 3.5 | 2.5 | 1.7 |
| 9 | 1.2 | 1.1 | 1.1 | 1.1 | 1.0 | 2.0 | 2.6 | 3.4 | 3.9 | 3.6 | 2.5 | 1.7 |
| 10 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.8 | 2.7 | 3.5 | 3.8 | 3.7 | 2.5 | 1.7 |
| 11 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.9 | 2.8 | 3.5 | 3.9 | 3.7 | 2.5 | 1.7 |
| 12 | 1.1 | 1.1 | 1.2 | 1.1 | 1.2 | 1.8 | 3.1 | 3.5 | 4.1 | 3.7 | 2.4 | 1.6 |
| 13 | 1.1 | 1.2 | 1.1 | 1.0 | 1.2 | 1.9 | 3.1 | 3.9 | 4.1 | 3.4 | 2.5 | 1.5 |
| 14 | 1.1 | 1.4 | 1.1 | 1.0 | 1.2 | 1.7 | 3.0 | 3.6 | 4.0 | 3.1 | 2.6 | 1.7 |
| 15 | 1.1 | 1.2 | 1.1 | 1.0 | 1.3 | 1.8 | 3.0 | 3.7 | 4.2 | 3.1 | 2.6 | 1.8 |
| 16 | 1.1 | 1.2 | 1.1 | 1.0 | 1.7 | 1.8 | 2.7 | 3.7 | 4.1 | 3.1 | 2.6 | 1.8 |
| 17 | 1.1 | 1.1 | 1.1 | 1.0 | 1.3 | 1.7 | 2.6 | 3.6 | 4.0 | 3.1 | 2.4 | 1.8 |
| 18 | 1.1 | 1.2 | 1.1 | 1.0 | 1.3 | 1.8 | 2.7 | 3.6 | 4.0 | 3.1 | 2.2 | 1.8 |
| 19 | 1.1 | 1.2 | 1.1 | 1.0 | 1.3 | 2.0 | 2.7 | 3.9 | 4.1 | 3.1 | 2.2 | 1.7 |
| 20 | 1.1 | 1.2 | 1.1 | 1.0 | 1.3 | 2.1 | 2.6 | 3.7 | 4.1 | 3.1 | 2.2 | 1.7 |
| 21 | 1.1 | 1.2 | 1.1 | 1.0 | 1.5 | 2.1 | 2.5 | 3.6 | 4.1 | 3.3 | 2.1 | 1.7 |
| 22 | 1.1 | 1.2 | 1.1 | 1.0 | 2.0 | 1.9 | 2.5 | 3.7 | 4.0 | 3.5 | 2.0 | 1.6 |
| 23 | 1.1 | 1.3 | 1.1 | 1.0 | 2.7 | 1.8 | 2.5 | 4.0 | 3.9 | 3.4 | 2.0 | 1.7 |
| 24 | 1.1 | 1.4 | 1.1 | 1.0 | 2.7 | 1.7 | 2.6 | 4.4 | 3.8 | 3.4 | 2.1 | 1.8 |
| 25 | 1.1 | 1.4 | 1.1 | 1.0 | 2.4 | 1.8 | 2.7 | 4.9 | 3.7 | 3.3 | 2.2 | 2.0 |
| 26 | 1.1 | 1.4 | 1.1 | 1.0 | 2.0 | 1.8 | 2.6 | 3.8 | 3.7 | 3.2 | 2.1 | 1.9 |
| 27 | 1.1 | 1.4 | 1.1 | 1.0 | 1.8 | 1.9 | 2.2 | 3.7 | 3.7 | 3.2 | 2.1 | 1.9 |
| 28 | 1.1 | 1.4 | 1.1 | 1.0 | 1.8 | 2.0 | 2.2 | 3.8 | 3.8 | 3.0 | 2.1 | 1.9 |
| 29 | 1.1 | 1.3 | 1.1 | 1.0 | 1.8 | 2.3 | 2.1 | 3.9 | 3.8 | 2.9 | 2.1 | 2.0 |
| 30 | 1.1 | 1.3 | 1.1 | 1.0 | ...... | 2.1 | 2.0 | 4.0 | 3.7 | 2.7 | 2.0 | 2.4 |
| 31 | 1.1 | ...... | 1.1 | 1.0 | ...... | 2.0 | ...... | 4.0 | ...... | 2.6 | 1.9 | ...... |

*Daily gage height, in feet, of West Walker River near Coleville, Cal., for 1902–1908*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 1 | 2.8 | 1.8 | 1.4 | 1.3 | 1.4 | 1.5 | 1.7 | 2.9 | 3.1 | 2.9 | 1.9 | 1.2 |
| 2 | 2.8 | 1.7 | 1.4 | 1.3 | 1.4 | 1.5 | 1.7 | 2.7 | 3.1 | 2.9 | 1.9 | 1.1 |
| 3 | 2.8 | 1.7 | 1.3 | 1.2 | 1.4 | 1.5 | 1.8 | 2.7 | 3.0 | 2.8 | 1.8 | 1.2 |
| 4 | 2.8 | 1.7 | 1.3 | 1.2 | 1.4 | 1.6 | 1.8 | 2.6 | 3.1 | 2.7 | 1.8 | 1.2 |
| 5 | 2.8 | 1.7 | 1.3 | 1.2 | 1.3 | 1.7 | 2.0 | 2.1 | 3.1 | 2.6 | 1.8 | 1.2 |
| 6 | 2.7 | 1.7 | 1.3 | 1.2 | 1.3 | 1.7 | 2.1 | 2.3 | 3.0 | 2.7 | 1.7 | 1.2 |
| 7 | 2.8 | 1.6 | 1.2 | 1.2 | 1.4 | 1.7 | 2.1 | 2.3 | 2.9 | 2.7 | 1.6 | 1.2 |
| 8 | 2.7 | 1.6 | 1.2 | 1.2 | 1.4 | 1.7 | 2.1 | 2.2 | 3.0 | 2.8 | 1.6 | 1.2 |
| 9 | 1.6 | 1.6 | 1.3 | 1.2 | 1.4 | 1.7 | 2.2 | 2.2 | 3.1 | 2.8 | 1.6 | 1.2 |
| 10 | 2.0 | 1.6 | 1.4 | 1.2 | 1.3 | 1.7 | 2.1 | 2.1 | 3.2 | 2.7 | 1.6 | 1.1 |
| 11 | 2.6 | 1.6 | 1.6 | 1.2 | 1.3 | 1.7 | 2.1 | 2.1 | 3.5 | 2.7 | 1.5 | 1.1 |
| 12 | 2.3 | 1.6 | 1.4 | 1.2 | 1.3 | 1.7 | 2.1 | 2.2 | 3.7 | 2.6 | 1.5 | 1.1 |
| 13 | 2.5 | 1.5 | 1.4 | 1.2 | 1.3 | 1.7 | 2.1 | 2.3 | 3.9 | 2.5 | 1.5 | 1.1 |
| 14 | 2.3 | 1.5 | 1.4 | 1.2 | 1.3 | 1.7 | 2.1 | 2.9 | 3.9 | 2.5 | 1.5 | 1.1 |
| 15 | 2.2 | 1.5 | 1.4 | 1.2 | 1.3 | 1.7 | 2.0 | 3.4 | 3.8 | 2.4 | 1.5 | 1.1 |
| 16 | 2.1 | 1.54 | 1.4 | 1.2 | 1.4 | 1.7 | 2.1 | 3.5 | 3.6 | 2.4 | 1.5 | 1.1 |
| 17 | 2.0 | 1.5 | 1.3 | 1.2 | 1.4 | 1.7 | 2.1 | 3.5 | 3.6 | 2.3 | 1.4 | 1.1 |
| 18 | 2.0 | 1.5 | 1.3 | 1.2 | 1.3 | 1.8 | 2.2 | 3.6 | 3.7 | 2.2 | 1.4 | 1.1 |
| 19 | 2.0 | 1.5 | 1.2 | 1.2 | 1.3 | 1.8 | 2.2 | 3.5 | 3.8 | 2.1 | 1.4 | 1.1 |
| 20 | 2.0 | 1.5 | 1.2 | 1.3 | 1.3 | 1.8 | 2.1 | 3.5 | 3.9 | 2.1 | 1.4 | 1.05 |
| 21 | 2.0 | 1.5 | 1.3 | 1.3 | 1.3 | 1.7 | 2.0 | 3.4 | 3.8 | 2.2 | 1.4 | 1.05 |
| 22 | 2.0 | 1.5 | 1.3 | 1.3 | 1.3 | 1.7 | 2.1 | 3.3 | 3.7 | 2.2 | 1.4 | 1.05 |
| 23 | 1.9 | 1.5 | 1.2 | 1.3 | 1.3 | 1.6 | 2.2 | 3.2 | 3.5 | 2.2 | 1.4 | 1.05 |
| 24 | 1.9 | 1.5 | 1.1 | 1.4 | 1.3 | 1.6 | 2.2 | 3.3 | 3.3 | 2.2 | 1.4 | 1.05 |
| 25 | 1.9 | 1.5 | 1.1 | 1.4 | 1.4 | 1.6 | 2.4 | 3.3 | 3.1 | 2.2 | 1.3 | 1.05 |
| 26 | 1.9 | 1.5 | 1.1 | 1.3 | 1.4 | 1.6 | 2.5 | 3.2 | 3.0 | 2.1 | 1.3 | 1.05 |
| 27 | 1.8 | 1.5 | 1.1 | 1.3 | 1.4 | 1.6 | 2.4 | 3.0 | 2.9 | 2.1 | 1.2 | 1.05 |
| 28 | 1.8 | 1.5 | 1.1 | 1.3 | 1.5 | 1.6 | 2.9 | 2.9 | 2.8 | 2.1 | 1.2 | 1.2 |
| 29 | 1.8 | 1.5 | 1.3 | 1.3 | ...... | 1.6 | 3.1 | 2.8 | 2.8 | 2.0 | 1.2 | 1.2 |
| 30 | 1.8 | 1.5 | 1.4 | 1.3 | ...... | 1.8 | 3.1 | 3.0 | 2.9 | 2.0 | 1.2 | 1.2 |
| 31 | 1.8 | ...... | 1.3 | 1.3 | ...... | 1.7 | ...... | 3.1 | ...... | 2.0 | 1.2 | ...... |
| **1905–6.** | | | | | | | | | | | | |
| 1 | 1.2 | 1.1 | .9 | 1.1 | 1.3 | 1.4 | 1.6 | 2.9 | 3.0 | 5.1 | 3.3 | 2.2 |
| 2 | 1.2 | 1.1 | .9 | 1.1 | 1.3 | 1.6 | 1.6 | 3.1 | 3.2 | 5.3 | 3.25 | 2.1 |
| 3 | 1.2 | 1.1 | 1.1 | .9 | 1.3 | 1.4 | 1.6 | 3.1 | 3.4 | 5.45 | 3.1 | 2.1 |
| 4 | 1.2 | 1.9 | 1.1 | 1.1 | 1.3 | 1.3 | 1.6 | 3.5 | 3.6 | 5.45 | 3.0 | 2.1 |
| 5 | 1.2 | 1.1 | 1.1 | 1.1 | 1.3 | 1.3 | 1.6 | 3.8 | 3.7 | 5.4 | 3.0 | 2.0 |
| 6 | 1.05 | 1.1 | 1.1 | 1.1 | 1.3 | 1.3 | 1.5 | 3.9 | 3.5 | 5.35 | 3.0 | 2.0 |
| 7 | 1.1 | 1.1 | 1.1 | 1.1 | 1.3 | 1.3 | 1.5 | 4.0 | 3.3 | 5.25 | 3.1 | 2.1 |
| 8 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.3 | 1.6 | 4.0 | 3.5 | 5.35 | 3.0 | 2.1 |
| 9 | 1.05 | 1.1 | 1.2 | 1.1 | 1.2 | 1.3 | 1.7 | 4.1 | 3.5 | 4.9 | 3.0 | 2.0 |
| 10 | 1.05 | 1.1 | 1.2 | 1.1 | 1.2 | 1.3 | 2.0 | 4.1 | 4.35 | 4.6 | 2.9 | 2.0 |
| 11 | 1.05 | 1.1 | 1.1 | 1.1 | 1.2 | 1.4 | 1.9 | 4.1 | 4.8 | 4.7 | 2.9 | 2.0 |
| 12 | 1.05 | .9 | 1.1 | 1.1 | 1.2 | 1.5 | 1.9 | 3.9 | 5.2 | 4.45 | 2.9 | 2.0 |
| 13 | 1.05 | .9 | 1.1 | 1.2 | 1.2 | 1.4 | 2.0 | 3.9 | 5.2 | 4.45 | 2.9 | 2.0 |
| 14 | 1.05 | .8 | 1.1 | 1.2 | 1.2 | 1.4 | 2.1 | 3.9 | 4.55 | 5.0 | 2.9 | 2.0 |
| 15 | 1.05 | .8 | 1.2 | 1.2 | 1.2 | 1.3 | 2.2 | 3.7 | 4.8 | 4.6 | 2.8 | 2.2 |
| 16 | 1.0 | .8 | 1.2 | 1.2 | 1.2 | 1.4 | 2.3 | 3.6 | 5.35 | 4.3 | 2.7 | 2.1 |
| 17 | 1.0 | .9 | 1.1 | 1.2 | 1.2 | 1.4 | 2.5 | 3.5 | 4.9 | 4.45 | 2.6 | 2.0 |
| 18 | 1.0 | .9 | 1.1 | 1.5 | 1.2 | 1.4 | 2.6 | 3.6 | 4.75 | 4.15 | 2.6 | 1.9 |
| 19 | 1.0 | .9 | 1.1 | 1.5 | 1.2 | 1.4 | 2.7 | 3.8 | 5.15 | 4.0 | 3.0 | 1.8 |
| 20 | 1.0 | .9 | 1.1 | 1.4 | 1.2 | 1.4 | 2.9 | 3.8 | 5.25 | 4.15 | 2.8 | 1.7 |
| 21 | 1.0 | .9 | 1.1 | 1.3 | 1.2 | 1.5 | 2.9 | 3.8 | 5.15 | 4.1 | 2.6 | 1.7 |
| 22 | 1.0 | .8 | 1.1 | 1.3 | 1.3 | 1.5 | 3.2 | 3.7 | 5.15 | 4.15 | 2.5 | 1.7 |
| 23 | 1.0 | .9 | 1.1 | 1.3 | 1.3 | 1.5 | 3.1 | 3.5 | 4.9 | 4.4 | 2.4 | 1.7 |
| 24 | 1.0 | .9 | 1.2 | 1.3 | 1.2 | 1.6 | 3.1 | 3.5 | 4.75 | 4.35 | 2.4 | 1.6 |
| 25 | 1.0 | .8 | 1.2 | 1.2 | 1.3 | 1.6 | 3.0 | 3.5 | 5.15 | 4.35 | 2.2 | 1.5 |
| 26 | 1.0 | .9 | 1.2 | 1.2 | 1.3 | 1.6 | 2.8 | 3.3 | 4.95 | 4.3 | 2.2 | 1.5 |
| 27 | 1.0 | .9 | 1.1 | 1.2 | 1.3 | 1.5 | 2.9 | 3.3 | 4.45 | 4.25 | 2.2 | 1.5 |
| 28 | 1.0 | .9 | 1.1 | 1.2 | 1.3 | 1.6 | 2.9 | 3.2 | 4.25 | 3.85 | 2.2 | 1.5 |
| 29 | 1.0 | 1.1 | .9 | 1.3 | ...... | 1.6 | 2.9 | 3.1 | 4.2 | 3.6 | 2.2 | 1.5 |
| 30 | 1.0 | 1.1 | .9 | 1.3 | ...... | 1.7 | 2.7 | 3.0 | 4.25 | 3.55 | 2.2 | 1.5 |
| 31 | 1.0 | ...... | .9 | 1.3 | ...... | 1.7 | ...... | 3.0 | ...... | 3.4 | 2.1 | ...... |

*Daily gage height, in feet, of West Walker River near Coleville, Cal., for 1902–1908*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 1 | 1.5 | 1.5 | 1.3 | 1.4 | 1.4 | 1.6 | 2.2 | 3.3 | 4.95 | 5.85 | 3.8 | 2.4 |
| 2 | 1.5 | 1.4 | 1.3 | 1.3 | 1.4 | 1.5 | 2.1 | 3.3 | 5.1 | 5.85 | 3.7 | 2.4 |
| 3 | 1.5 | 1.4 | 1.3 | 1.3 | 1.5 | 1.5 | 2.0 | 3.3 | 5.4 | 5.9 | 3.6 | 2.4 |
| 4 | 1.4 | 1.4 | 1.3 | 1.3 | 1.6 | 1.6 | 2.0 | 3.4 | 5.45 | 5.85 | 3.4 | 2.4 |
| 5 | 1.4 | 1.5 | 1.3 | 1.3 | 1.8 | 1.6 | 2.0 | 3.5 | 5.3 | 5.8 | 3.4 | 2.4 |
| 6 | 1.4 | 1.5 | 1.3 | 1.3 | 1.8 | 1.6 | 2.0 | 3.4 | 5.3 | 5.75 | 3.4 | 2.4 |
| 7 | 1.4 | 1.5 | 1.4 | 1.3 | 1.8 | 1.6 | 2.0 | 3.2 | 4.9 | 5.6 | 3.3 | 2.4 |
| 8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.7 | 1.6 | 2.0 | 3.1 | 4.5 | 5.3 | 3.2 | 2.4 |
| 9 | 1.4 | 1.4 | 1.4 | 1.4 | 1.7 | 1.6 | 2.1 | 3.2 | 4.35 | 4.8 | 3.1 | 2.4 |
| 10 | 1.4 | 1.4 | 1.4 | 1.4 | 1.6 | 1.6 | 2.2 | 3.3 | 4.3 | 4.75 | 3.1 | 2.4 |
| 11 | 1.4 | 1.4 | 1.4 | 1.4 | 1.6 | 1.6 | 2.4 | 3.5 | 4.4 | 4.75 | 3.0 | 2.4 |
| 12 | 1.4 | 1.4 | 1.4 | 1.4 | 1.6 | 1.7 | 2.3 | 3.5 | 4.1 | 4.65 | 3.0 | 2.4 |
| 13 | 1.4 | 1.4 | 1.4 | 1.4 | 1.6 | 1.7 | 2.7 | 3.5 | 4.05 | 4.65 | 3.1 | 2.4 |
| 14 | 1.4 | 1.4 | 1.4 | 1.3 | 1.6 | 1.8 | 3.2 | 3.5 | 3.45 | 4.6 | 3.2 | 2.3 |
| 15 | 1.4 | 1.4 | 1.4 | 1.3 | 1.6 | 1.8 | 3.2 | 3.5 | 3.4 | 4.45 | 3.3 | 2.3 |
| 16 | 1.4 | 1.4 | 1.4 | 1.3 | 1.6 | 1.8 | 3.2 | 3.6 | 3.2 | 4.45 | 3.4 | 2.3 |
| 17 | 1.4 | 1.4 | 1.4 | 1.3 | 1.6 | 2.9 | 3.1 | 3.7 | 2.85 | 4.4 | 3.4 | 2.2 |
| 18 | 1.4 | 1.4 | 1.4 | 1.3 | 1.5 | 3.8 | 3.1 | 3.9 | 2.9 | 4.35 | 3.4 | 2.1 |
| 19 | 1.4 | 1.3 | 1.3 | 1.3 | 1.5 | 4.1 | 3.0 | 4.1 | 3.1 | 4.35 | 3.3 | 2.1 |
| 20 | 1.4 | 1.3 | 1.3 | 1.4 | 1.5 | 3.9 | 3.1 | 4.0 | 3.2 | 4.2 | 3.2 | 2.0 |
| 21 | 1.4 | 1.3 | 1.3 | 1.4 | 1.6 | 3.7 | 3.2 | 4.0 | 3.35 | 4.2 | 3.1 | 2.0 |
| 22 | 1.3 | 1.3 | 1.3 | 1.4 | 1.6 | 3.5 | 3.2 | 4.0 | 3.45 | 4.25 | 2.9 | 2.0 |
| 23 | 1.4 | 1.3 | 1.3 | 1.4 | 1.6 | 3.1 | 3.2 | 4.0 | 4.05 | 4.25 | 2.8 | 2.0 |
| 24 | 1.4 | 1.3 | 1.3 | 1.4 | 1.5 | 2.4 | 3.2 | 3.9 | 3.95 | 4.4 | 2.7 | 2.0 |
| 25 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 2.0 | 3.3 | 3.9 | 4.2 | 4.35 | 2.7 | 1.9 |
| 26 | 1.4 | 1.3 | 1.4 | 1.4 | 1.6 | 2.0 | 3.3 | 3.9 | 4.35 | 4.35 | 2.6 | 1.9 |
| 27 | 1.4 | 1.3 | 1.5 | 1.4 | 1.6 | 2.1 | 3.3 | 3.9 | 4.7 | 4.35 | 2.6 | 1.9 |
| 28 | 1.4 | 1.3 | 1.5 | 1.5 | 1.6 | 2.1 | 3.3 | 3.9 | 5.2 | 4.45 | 2.6 | 1.9 |
| 29 | 1.3 | 1.3 | 1.4 | 1.5 | ...... | 2.2 | 3.3 | 3.9 | 5.6 | 4.2 | 2.5 | 1.8 |
| 30 | 1.4 | 1.3 | 1.4 | 1.5 | ...... | 2.3 | 3.3 | 4.1 | 5.5 | 4.0 | 2.5 | 1.8 |
| 31 | 1.4 | ...... | 1.4 | 1.4 | ...... | 2.2 | ...... | 4.6 | ...... | 3.9 | 2.5 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1907-8. | | | | | | | | | | |
| 1 | 1.9 | 1.8 | 1.4 | 1.5 | 1.4 | 1.3 | 2.0 | 3.3 | 2.9 | 3.0 |
| 2 | 1.8 | 1.7 | 1.4 | 1.5 | 1.4 | 1.3 | 2.0 | 3.2 | 3.0 | 3.1 |
| 3 | 1.8 | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 | 2.0 | 3.0 | 2.9 | 3.1 |
| 4 | 1.8 | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 | 2.1 | 2.8 | 2.8 | 3.1 |
| 5 | 1.8 | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 | 2.2 | 2.7 | 2.9 | 3.1 |
| 6 | 1.8 | 1.7 | 1.5 | 1.5 | 1.3 | 1.3 | 2.2 | 2.9 | 3.0 | 3.1 |
| 7 | 1.8 | 1.7 | 1.5 | 1.5 | 1.3 | 1.3 | 2.0 | 3.1 | 3.2 | 3.0 |
| 8 | 1.8 | 1.7 | 1.5 | 1.5 | 1.3 | 1.3 | 2.0 | 2.9 | 3.4 | 3.1 |
| 9 | 1.8 | 1.7 | 1.5 | 1.5 | 1.3 | 1.4 | 2.0 | 2.7 | 3.4 | 3.0 |
| 10 | 1.8 | 1.7 | 1.5 | 1.6 | 1.3 | 1.5 | 2.1 | 2.7 | 3.4 | 2.9 |
| 11 | 1.8 | 1.7 | 1.6 | 1.6 | 1.3 | 1.5 | 2.2 | 2.6 | 3.5 | 2.9 |
| 12 | 1.8 | 1.7 | 1.6 | 1.6 | 1.3 | 1.6 | 2.5 | 2.6 | 3.5 | 2.8 |
| 13 | 1.8 | 1.7 | 1.6 | 1.5 | 1.3 | 1.7 | 2.7 | 2.6 | 3.6 | 2.8 |
| 14 | 1.7 | 1.6 | 1.5 | 1.5 | 1.4 | 1.7 | 2.8 | 2.6 | 3.5 | 2.7 |
| 15 | 1.7 | 1.6 | 1.5 | 1.5 | 1.5 | 1.8 | 2.7 | 2.9 | 3.3 | 2.6 |
| 16 | 1.7 | 1.6 | 1.5 | 1.5 | 1.5 | 1.8 | 2.7 | 2.6 | 3.2 | 2.5 |
| 17 | 1.7 | 1.6 | 1.5 | 1.5 | 1.6 | 1.9 | 2.6 | 2.5 | 3.2 | 2.5 |
| 18 | 1.7 | 1.8 | 1.5 | 1.5 | 1.7 | 2.0 | 2.6 | 2.5 | 3.1 | 2.5 |
| 19 | 1.7 | 1.7 | 1.5 | 1.5 | 1.6 | 2.0 | 2.4 | 2.6 | 3.1 | 2.5 |
| 20 | 1.7 | 1.6 | 1.5 | 1.5 | 1.5 | 2.0 | 2.1 | 2.6 | 2.9 | 2.5 |
| 21 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 2.1 | 2.0 | 2.6 | 2.8 | 2.4 |
| 22 | 1.7 | 1.6 | 1.6 | 1.5 | 1.4 | 2.1 | 1.8 | 2.7 | 2.8 | 2.4 |
| 23 | 1.7 | 1.6 | 1.5 | 1.4 | 1.4 | 2.1 | 1.7 | 2.9 | 2.9 | 2.4 |
| 24 | 1.7 | 1.6 | 1.5 | 1.4 | 1.4 | 2.2 | 2.0 | 3.0 | 3.0 | 2.4 |
| 25 | 1.7 | 1.6 | 1.5 | 1.5 | 1.4 | 2.2 | 2.5 | 3.2 | 3.1 | 2.4 |
| 26 | 1.8 | 1.5 | 1.5 | 1.5 | 1.4 | 2.1 | 2.6 | 3.2 | 3.1 | 2.5 |
| 27 | 1.9 | 1.5 | 1.5 | 1.5 | 1.4 | 2.0 | 2.8 | 3.2 | 3.2 | 2.5 |
| 28 | 1.9 | 1.5 | 1.6 | 1.5 | 1.4 | 2.0 | 3.0 | 3.1 | 3.2 | 2.5 |
| 29 | 1.8 | 1.5 | 1.6 | 1.5 | 1.3 | 1.9 | 3.1 | 3.4 | 3.1 | 2.4 |
| 30 | 1.8 | 1.4 | 1.5 | 1.4 | ...... | 2.0 | 3.2 | 3.4 | 3.0 | 2.5 |
| 31 | 1.8 | ...... | 1.5 | 1.4 | ...... | 2.0 | ...... | 3.1 | ...... | 2.4 |

*Rating tables for West Walker River near Coleville, Cal.*

**October 4, 1902, to December 31, 1903.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.0 | 60 | 1.8 | 170 | 2.6 | 426 | 3.4 | 1,025 |
| 1.1 | 67 | 1.9 | 192 | 2.7 | 476 | 3.5 | 1,160 |
| 1.2 | 75 | 2.0 | 215 | 2.8 | 530 | 3.6 | 1,305 |
| 1.3 | 85 | 2.1 | 240 | 2.9 | 590 | 3.7 | 1,450 |
| 1.4 | 98 | 2.2 | 269 | 3.0 | 655 | 3.8 | 1,595 |
| 1.5 | 113 | 2.3 | 302 | 3.1 | 730 | 3.9 | 1,740 |
| 1.6 | 130 | 2.4 | 340 | 3.2 | 815 | 4.0 | 1,885 |
| 1.7 | 149 | 2.5 | 381 | 3.3 | 910 | 4.1 | 2,030 |

NOTE.—Curve is not very well determined above 3 feet gage height.

**January 1 to December 31, 1904.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.00 | 60 | 2.00 | 220 | 3.00 | 605 | 4.00 | 1,240 |
| 1.10 | 67 | 2.10 | 248 | 3.10 | 655 | 4.10 | 1,320 |
| 1.20 | 75 | 2.20 | 278 | 3.20 | 708 | 4.20 | 1,405 |
| 1.30 | 85 | 2.30 | 311 | 3.30 | 764 | 4.30 | 1,495 |
| 1.40 | 98 | 2.40 | 347 | 3.40 | 823 | 4.40 | 1,585 |
| 1.50 | 113 | 2.50 | 385 | 3.50 | 885 | 4.50 | 1,680 |
| 1.60 | 130 | 2.60 | 425 | 3.60 | 950 | 4.60 | 1,780 |
| 1.70 | 149 | 2.70 | 467 | 3.70 | 1,015 | 4.70 | 1,885 |
| 1.80 | 170 | 2.80 | 511 | 3.80 | 1,085 | 4.80 | 1,990 |
| 1.90 | 194 | 2.90 | 557 | 3.90 | 1,160 | 4.90 | 2,100 |

NOTE.—Table applicable only to open channel. It is based upon 13 discharge measurements made during 1903 and 1904. It is well defined between gage heights 1.00 foot and 3.70 feet.

**January 1 to December 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.80 | 44 | 1.60 | 121 | 2.40 | 317 | 3.20 | 702 |
| .90 | 50 | 1.70 | 138 | 2.50 | 353 | 3.30 | 762 |
| 1.00 | 56 | 1.80 | 157 | 2.60 | 393 | 3.40 | 823 |
| 1.10 | 62 | 1.90 | 178 | 2.70 | 436 | 3.50 | 886 |
| 1.20 | 70 | 2.00 | 201 | 2.80 | 483 | 3.60 | 952 |
| 1.30 | 80 | 2.10 | 226 | 2.90 | 534 | 3.70 | 1,020 |
| 1.40 | 92 | 2.20 | 254 | 3.00 | 588 | 3.80 | 1,090 |
| 1.50 | 106 | 2.30 | 284 | 3.10 | 644 | 3.90 | 1,160 |

NOTE.—Table applicable only to open channel. It is based on 11 discharge measurements made during 1905. It is well defined between gage heights 1.2 feet and 3.5 feet.

**January 1 to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.90 | 50 | 1.90 | 190 | 2.90 | 580 | 3.90 | 1,430 |
| 1.00 | 58 | 2.00 | 220 | 3.00 | 645 | 4.00 | 1,540 |
| 1.10 | 67 | 2.10 | 250 | 3.10 | 715 | 4.20 | 1,760 |
| 1.20 | 77 | 2.20 | 280 | 3.20 | 790 | 4.40 | 1,990 |
| 1.30 | 87 | 2.30 | 315 | 3.30 | 870 | 4.60 | 2,230 |
| 1.40 | 98 | 2.40 | 350 | 3.40 | 955 | 4.80 | 2,470 |
| 1.50 | 110 | 2.50 | 385 | 3.50 | 1,040 | 5.00 | 2,710 |
| 1.60 | 125 | 2.60 | 425 | 3.60 | 1,130 | 5.20 | 2,970 |
| 1.70 | 145 | 2.70 | 470 | 3.70 | 1,220 | 5.40 | 3,230 |
| 1.80 | 165 | 2.80 | 520 | 3.80 | 1,320 | | |

NOTE.—Table applicable only to open channel. It is based on discharge measurements made during 1903-1906 and is fairly well defined.

**January 1, 1907, to July 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.30 | 85 | 2.40 | 330 | 3.50 | 960 | 4.60 | 2,240 |
| 1.40 | 100 | 2.50 | 365 | 3.60 | 1,050 | 4.70 | 2,380 |
| 1.50 | 116 | 2.60 | 405 | 3.70 | 1,140 | 4.80 | 2,520 |
| 1.60 | 133 | 2.70 | 445 | 3.80 | 1,240 | 4.90 | 2,670 |
| 1.70 | 151 | 2.80 | 490 | 3.90 | 1,350 | 5.00 | 2,820 |
| 1.80 | 170 | 2.90 | 540 | 4.00 | 1,470 | 5.20 | 3,120 |
| 1.90 | 190 | 3.00 | 600 | 4.10 | 1,590 | 5.40 | 3,420 |
| 2.00 | 210 | 3.10 | 660 | 4.20 | 1,710 | 5.60 | 3,720 |
| 2.10 | 235 | 3.20 | 720 | 4.30 | 1,840 | 5.80 | 4,020 |
| 2.20 | 265 | 3.30 | 790 | 4.40 | 1,970 | 6.00 | 4,320 |
| 2.30 | 295 | 3.40 | 870 | 4.50 | 2,100 | | |

NOTE.—Table applicable only to open channel. It is based on 40 discharge measurements made during 1903 to 1908. It is well defined below gage height 2.2 feet and fairly well above.

*Monthly discharge of West Walker River near Coleville, Cal., for 1902–1908.*

[Drainage area, 306 square miles.[a]]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1902–3.** | | | | | | |
| October 5–31 | 85 | 60 | 67 | 0.22 | 0.22 | 3,588 |
| November | 113 | 67 | 83 | .27 | .30 | 4,939 |
| December | 98 | 60 | 75 | .25 | .29 | 4,612 |
| January | 98 | 60 | 69 | .23 | .27 | 4,243 |
| February | 98 | 60 | 79 | .26 | .27 | 4,387 |
| March | 302 | 67 | 105 | .34 | .39 | 6,456 |
| April | 476 | 113 | 246 | .80 | .89 | 14,638 |
| May | 1,865 | 340 | 888 | 2.90 | 3.34 | 54,601 |
| June | 2,030 | 815 | 1,512 | 4.94 | 5.51 | 89,970 |
| July | 1,160 | 192 | 402 | 1.31 | 1.51 | 24,718 |
| August | 215 | 85 | 143 | .47 | .54 | 8,793 |
| September | 85 | 67 | 75 | .25 | .28 | 4,463 |
| The period | | | | | | 225,000 |
| **1903–4.** | | | | | | |
| October | 75 | 67 | 67 | .22 | .25 | 4,120 |
| November | 98 | 67 | 77 | .25 | .28 | 4,580 |
| December | 75 | 67 | 67 | .22 | .25 | 4,120 |
| January | 67 | 60 | 62.7 | .205 | .24 | 3,855 |
| February | 467 | 60 | 131 | .428 | .46 | 7,535 |
| March | 311 | 149 | 187 | .611 | .70 | 11,500 |
| April | 665 | 170 | 384 | 1.25 | 1.40 | 22,850 |
| May | 2,100 | 220 | 919 | 3.00 | 3.46 | 56,510 |
| June | 1,495 | 823 | 1,188 | 3.88 | 4.33 | 70,690 |
| July | 1,015 | 425 | 785 | 2.57 | 2.96 | 48,270 |
| August | 467 | 194 | 332 | 1.08 | 1.24 | 20,410 |
| September | 347 | 113 | 172 | .56 | .63 | 10,240 |
| The year | 2,100 | 60 | 364 | 1.19 | 16.20 | 265,000 |
| **1904–5.** | | | | | | |
| October | 511 | 130 | 299 | .977 | 1.13 | 18,380 |
| November | 170 | 113 | 125 | .408 | .46 | 7,438 |
| December | 130 | 67 | 85.7 | .280 | .32 | 5,269 |
| January | 92 | 70 | 75.3 | .246 | .28 | 4,630 |
| February | 106 | 80 | 86.1 | .281 | .29 | 4,782 |
| March | 157 | 106 | 133 | .435 | .50 | 8,178 |
| April | 644 | 138 | 266 | .869 | .97 | 15,830 |
| May | 962 | 226 | 556 | 1.82 | 2.10 | 34,310 |
| June | [illegible] | 483 | 791 | 2.58 | 2.88 | 47,070 |
| July | 554 | 201 | 334 | 1.09 | 1.26 | 20,540 |
| August | 178 | 70 | 107 | .350 | .40 | 6,579 |
| September | 70 | 59 | 64.1 | .209 | .23 | 3,814 |
| The year | [illegible] | 59 | 244 | .795 | 10.82 | 176,000 |
| **1905–6.** | | | | | | |
| October | 70 | 56 | 59.4 | .194 | .22 | 3,652 |
| November | 178 | 44 | 58.1 | .190 | .21 | 3,457 |
| December | 70 | 50 | 61.9 | .202 | .23 | 3,806 |
| January | 110 | 50 | 77.6 | .254 | .29 | 4,770 |
| February | 87 | 77 | 81.6 | .267 | .28 | 4,530 |
| March | 143 | 87 | 105 | .343 | .40 | 6,460 |
| April | 790 | 110 | 360 | 1.18 | 1.32 | 21,400 |
| May | 1,650 | 580 | 1,140 | 3.73 | 4.30 | 70,100 |
| June | 2,190 | 645 | 2,050 | 6.70 | 7.48 | 122,000 |
| July | 3,300 | 965 | 2,180 | 7.12 | 8.21 | 134,000 |
| August | 570 | 250 | 506 | 1.65 | 1.90 | 31,100 |
| September | 280 | 110 | 192 | .627 | .70 | 11,400 |
| The year | 3,300 | 44 | 573 | 1.87 | 25.54 | 417,000 |
| **1906–7.** | | | | | | |
| [illegible] | 110 | 87 | 98.5 | .322 | .37 | 6,060 |
| [illegible] | 110 | 87 | 95.6 | .312 | .35 | 5,690 |
| [illegible] | 110 | 87 | 94.5 | .309 | .36 | 5,810 |
| [illegible] | 110 | 85 | 95.7 | .313 | .36 | 5,880 |
| [illegible] | 170 | 130 | 132 | .431 | .45 | 7,330 |
| [illegible] | 1,390 | 116 | 380 | 1.24 | 1.43 | 23,400 |
| [illegible] | 790 | 230 | 525 | 1.71 | 1.91 | 31,100 |
| [illegible] | 3,340 | [illegible] | 1,150 | 3.76 | 4.34 | 70,700 |

[a] [illegible] determined from later maps is 308 square miles.

*Monthly discharge of West Walker River near Coleville, Cal., for 1902–1908.*—Continued.

| Month. | Discharge in second-feet | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1906–7.** | | | | | | |
| June | 3,720 | 515 | 1,960 | 6.41 | 7.15 | 117,000 |
| July | 4,170 | 1,350 | 2,480 | 8.11 | 9.35 | 152,000 |
| August | 1,240 | 365 | 685 | 2.24 | 2.58 | 42,100 |
| September | 330 | 170 | 269 | .879 | .98 | 16,000 |
| The year | 4,170 | 85 | 664 | 2.17 | 29.63 | 483,000 |
| **1907–8.** | | | | | | |
| October | 190 | 151 | 165 | .539 | .62 | 10,100 |
| November | 170 | 100 | 140 | .458 | .51 | 8,330 |
| December | 133 | 100 | 119 | .389 | .45 | 7,320 |
| January | 133 | 100 | 116 | .379 | .44 | 7,130 |
| February | 151 | 85 | 102 | .333 | .36 | 5,870 |
| March | 265 | 85 | 165 | .539 | .62 | 10,100 |
| April | 720 | 151 | 336 | 1.10 | 1.23 | 20,000 |
| May | 870 | 365 | 548 | 1.79 | 2.06 | 33,700 |
| June | 1,050 | 490 | 693 | 2.26 | 2.52 | 41,200 |
| July | 660 | 330 | 460 | 1.50 | 1.73 | 28,300 |
| The period | ........ | ........ | ........ | ........ | ........ | 172,000 |

NOTE.—Values for winter months are liable to error on account of ice.

### WEST WALKER RIVER NEAR COLEVILLE, CAL. (LOWER STATION).

This station is located at the head of Antelope Valley, in the NE. ¼ sec. 28, T. 8 N., R. 23 E., about half a mile below the mouth of Ross Canyon Creek, 5 miles southeast of Coleville, and is about one-half mile below the site of the station maintained by the Survey during 1902 to 1908.

The gage is a vertical staff. Discharge measurements are made either from the car and cable or the bridge. The channel is composed of compact gravel and cobblestones and is slightly shifting. The drainage area above the station is about 248 square miles. Results are excellent.

The following records of daily discharge were furnished by the Stone & Webster Engineering Corporation:

*Daily discharge, in second-feet, of West Walker River near Coleville, Cal., for 1909–1910.*

| Day. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Day. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | 1909. | | | | | | | |
| 1 | 70 | 92 | 680 | 1,500 | 1,500 | 315 | 120 | 16 | 85 | 380 | 680 | 1,500 | 920 | 195 | 90 |
| 2 | 70 | 110 | 840 | 1,950 | 1,590 | 335 | 110 | 17 | 85 | 425 | 680 | 1,320 | 720 | 195 | 77 |
| 3 | 85 | 150 | 920 | 2,040 | 1,860 | 335 | 120 | 18 | 85 | 475 | 720 | 1,240 | 680 | 195 | 77 |
| 4 | 85 | 150 | 1,000 | 2,225 | 1,860 | 315 | 120 | 19 | 85 | 510 | 760 | 1,000 | 680 | 210 | 77 |
| 5 | 60 | 135 | 1,000 | 2,225 | 1,240 | 315 | 110 | 20 | 85 | 510 | 920 | 1,000 | 540 | 210 | 77 |
| 6 | 85 | 120 | 1,080 | 2,130 | 920 | 300 | 110 | 21 | 77 | 380 | 1,160 | 1,160 | 540 | 210 | 70 |
| 7 | 70 | 135 | 1,120 | 1,590 | 760 | 300 | 100 | 22 | 77 | 335 | 920 | 1,410 | 610 | 225 | 70 |
| 8 | 70 | 150 | 1,160 | 1,590 | 760 | 300 | 100 | 23 | 85 | 335 | 680 | 1,950 | 610 | 210 | 70 |
| 9 | 70 | 180 | 1,080 | 1,410 | 840 | 300 | 100 | 24 | 77 | 335 | 610 | 1,860 | 540 | 180 | 70 |
| 10 | 60 | 210 | 1,000 | 1,410 | 840 | 285 | 90 | 25 | 85 | 380 | 645 | 1,860 | 540 | 150 | 70 |
| 11 | 60 | 180 | 880 | 1,590 | 920 | 285 | 90 | 26 | 85 | 475 | 920 | 1,590 | 475 | 150 | 70 |
| 12 | 55 | 195 | 680 | 1,770 | 1,080 | 285 | 90 | 27 | 77 | 610 | 1,080 | 1,500 | 335 | 150 | 77 |
| 13 | 60 | 240 | 575 | 1,590 | 1,080 | 270 | 90 | 28 | 77 | 610 | 1,080 | 1,590 | 335 | 135 | 70 |
| 14 | 70 | 330 | 540 | 1,590 | 1,000 | 225 | 90 | 29 | 85 | 610 | 840 | 1,500 | 335 | 135 | 70 |
| 15 | 85 | 335 | 645 | 2,040 | 920 | 195 | 90 | 30 | 60 | 610 | 840 | 1,680 | 335 | 135 | 70 |
| | | | | | | | | 31 | 85 | ...... | 1,320 | ...... | 355 | 150 | ...... |

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | | | | |
| [illegible] | 7 | 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | 7 | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | 7 | [illegible] | 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | 7 | 7 | 4 | 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | [illegible] | 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | 7 | [illegible] | 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | [illegible] | 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | [illegible] | 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | [illegible] | 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | [illegible] | [illegible] | 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | 4 | 3 | 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 7 | 7 | 4 | 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 7 | [illegible] | [illegible] | 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 6 | [illegible] | 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 6 | [illegible] | [illegible] | [illegible] | 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 6 | [illegible] | [illegible] | [illegible] | 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 15 | 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 10 | [illegible] | [illegible] | 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 12 | 3 | [illegible] | ...... | 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 6 | ...... | 21 | [illegible] | ...... | 21 | ...... | [illegible] | ...... | [illegible] | [illegible] | [illegible] |

*[illegible] West Walker River near [illegible], Cal., for [illegible]*

[illegible]

| [illegible] | [illegible] | | | | [illegible] | |
|---|---|---|---|---|---|---|
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | | | |
| [illegible] | [illegible] | 5 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 61 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 33 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 15 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 19 | 7 | [illegible] | [illegible] | .4 | [illegible] |
| [illegible] | | | | | | [illegible] |
| [illegible] | | | | | | |
| [illegible] | [illegible] | [illegible] | 7 | [illegible] | [illegible] | [illegible] |
| [illegible] | 64 | [illegible] | 12 | [illegible] | [illegible] | [illegible] |
| [illegible] | 64 | [illegible] | 11 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | .33 | .4 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 15 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 21 | 35 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 7 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | | | [illegible] |

[illegible]

[illegible] Survey.

### EAST FORK OF WEST WALKER RIVER NEAR BRIDGEPORT, CAL.

This station is located at Blackburn's,[1] about 100 yards below the mouth of Hot Creek, in the NE. ¼ sec. 28, T. 6 N., R. 23 E., about 3 miles above the junction with West Walker River, and 14 miles northwest of Bridgeport.

The gage is a vertical staff at the footbridge from which discharge measurements are made. The channel, which is composed of compact gravel and cobblestones, is fairly permanent. Results are considered excellent.

The following records of daily discharge were furnished by the Stone & Webster Engineering Corporation.

*Daily discharge, in second-feet, of East Fork of West Walker River near Bridgeport, Cal., for 1910.*

| Day. | Apr. | May. | June. | July. | Aug. | Day. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | | | 1910. | | | | | |
| 1 | | 112 | 325 | 112 | 49 | 16 | | 208 | 180 | 58 | 35 |
| 2 | | 90 | 325 | 112 | 49 | 17 | | 180 | 180 | 71 | 35 |
| 3 | | 112 | 301 | 112 | 49 | 18 | | 180 | 180 | 160 | 30 |
| 4 | | 112 | 278 | 90 | 49 | 19 | | 208 | 160 | 90 | 30 |
| 5 | | 90 | 278 | 90 | 41 | 20 | | 208 | 160 | 112 | 30 |
| 6 | | 90 | 254 | 90 | 41 | 21 | 112 | 208 | 160 | 112 | 30 |
| 7 | | 90 | 254 | 90 | 41 | 22 | 112 | 231 | 136 | 90 | 30 |
| 8 | | 112 | 208 | 90 | 41 | 23 | 112 | 254 | 136 | 71 | 30 |
| 9 | | 160 | 208 | 90 | 35 | 24 | 112 | 301 | 136 | 71 | 30 |
| 10 | | 160 | 254 | 90 | 35 | 25 | 136 | 254 | 136 | 58 | 30 |
| 11 | | 160 | 254 | 90 | 35 | 26 | 136 | 254 | 136 | 58 | 30 |
| 12 | | 160 | 231 | 71 | 35 | 27 | 160 | 278 | 136 | 58 | 30 |
| 13 | | 180 | 231 | 71 | 35 | 28 | 180 | 301 | 112 | 58 | 30 |
| 14 | | 180 | 231 | 71 | 35 | 29 | 136 | 301 | 112 | 58 | 26 |
| 15 | | 208 | 208 | 71 | 35 | 30 | 112 | 325 | 112 | 49 | 26 |
| | | | | | | 31 | | 325 | | 49 | 26 |

*Monthly discharge of East Fork of West Walker River near Bridgeport, Cal., for 1910.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| April 21-30 | 180 | 112 | 131 | 2,600 |
| May | 325 | 90 | 195 | 12,000 |
| June | 325 | 112 | 200 | 11,900 |
| July | 160 | 49 | 82.7 | 5,080 |
| August | 49 | 26 | 34.9 | 2,150 |

NOTE.—Monthly values computed by engineers of the United States Geological Survey.

### EAST WALKER RIVER NEAR BRIDGEPORT, CAL.

This station, which is located in the SW. ¼ SE. ¼ sec. 34, T. 6 N., R. 25 E., in the Mono National Forest, about 4½ miles north of Bridgeport, was established July 29, 1911.

The gage is a vertical staff located on the left bank. The channel is composed of gravel. Winter flow is affected by ice.

[1] Hardy station, Bridgeport quadrangle, United States Geological Survey.

This station is maintained in cooperation with the United States Forest Service.

Estimates of discharge are withheld until additional data have been obtained.

The following discharge measurement was made by H. J. Tompkins:

June 16, 1912: Gage height, 0.85 foot; discharge, 270 second-feet.

*Daily gage height, in feet, of East Walker River near Bridgeport, Cal., for 1911–12.*

| Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1911. | | | | 1911. | | | |
| 1 | | | 0.79 | 16 | | | |
| 2 | | 1.91 | | 17 | | | |
| 3 | | | | 18 | | | |
| 4 | | | | 19 | | 1.01 | |
| 5 | | | | 20 | | | |
| 6 | | 1.98 | | 21 | | | |
| 7 | | | | 22 | | .90 | 0.56 |
| 8 | | 1.11 | | 23 | | | |
| 9 | | | | 24 | | | |
| 10 | | | | 25 | | | |
| 11 | | | | 26 | | .86 | .52 |
| 12 | | | | 27 | | | |
| 13 | | 1.09 | .51 | 28 | | | |
| 14 | | | | 29 | 2.15 | .83 | |
| 15 | | | | 30 | | | .54 |
| | | | | 31 | | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | | 0.41 | | | | | | | |
| 2 | 0.48 | | 0.88 | | | | | | |
| 3 | | | | | 1.0 | 0.02 | | | |
| 4 | | .40 | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | −0.1 | | |
| 7 | .45 | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | 1.12 | | | | | | |
| 10 | .40 | | | | .2 | .16 | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | .45 | | | | | | | |
| 14 | .41 | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | 1.20 | | | .02 | | | 0.85 |
| 17 | | | | | .40 | | | | |
| 18 | | .00 | | | | | | | |
| 19 | | | | | | | | | |
| 20 | .36 | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | −.02 | | | |
| 24 | .39 | | | | .15 | | | | |
| 25 | | .99 | | | | | | | |
| 26 | | | | | | | | | |
| 27 | | | | 1.5 | | | | | |
| 28 | .42 | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | .40 | | | | | | | | |
| 31 | | | | | | .00 | | | |

NOTE.—Water below bottom of gage during part of April and May, 1912.

## ROBINSON CREEK NEAR BRIDGEPORT, CAL.

Robinson Creek rises on the eastern slope of the Sierra in Mono County, Cal., and flows northeastward, passing through Twin Lakes to its junction with the East Walker River 2 miles north of Bridgeport.

This station, which is located at the mouth of the canyon, 5½ miles southwest of Bridgeport, in the SW. ¼ NW. ¼ sec. 15, T. 4 N., R. 24 E., in the Mono National Forest, was established November 18, 1910.

Lower Twin Lake is about 3 miles above the station, and the junction with Buckeye Creek is 5 miles below. No water is diverted above the gage. The low-water flow is entirely used for irrigation in Bridgeport Valley. Twin Lakes is an excellent reservoir site. At the present time this storage is only partly developed.

The gage is a vertical staff fastened to a pine tree on the left bank near the site of an old sawmill.

Discharge measurements are made by wading near the gage.

Both banks are high and will not overflow. The channel is composed of gravel and small bowlders.

The station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of Robinson Creek near Bridgeport, Cal., in 1910-1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | Feet. | Sec.-ft. | 1911. | | Feet. | Sec.-ft. |
| Nov. 18 | H. D. McGlashan | 2.28 | 6.1 | July 25 | G. T. Peekema | 4.50 | 387 |
| 1911. | | | | 1912. | | | |
| June 17 | J. E. Stewart | 5.00 | 578 | June 12 | H. J. Tompkins | 3.92 | 217 |

*Daily gage height, in feet, of Robinson Creek near Bridgeport, Cal., for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | |
| 1 | | | | | | | | 4.45 | | 3.45 |
| 2 | | | | | | 3.11 | | | 4.20 | |
| 3 | | 2.33 | | | | | 3.78 | 4.43 | | |
| 4 | | | 2.29 | | | | | | | |
| 5 | | | | | | | | | 4.38 | |
| 6 | | | | | | | 3.90 | 4.50 | | |
| 7 | | 2.28 | 2.31 | | | | | | | |
| 8 | | | | | 2.99 | | | | 3.49 | |
| 9 | | | | | | 2.90 | | | | |
| 10 | | 2.30 | | | | | 4.05 | | | |
| 11 | | | 2.30 | | | | | | | |
| 12 | | | | | 3.00 | | 4.20 | 4.50 | 3.67 | |
| 13 | | | | | | 3.45 | | | | 3.12 |
| 14 | | 2.29 | | | | | | | | |
| 15 | | | | | 2.95 | | | | | 3.10 |
| 16 | | | | | | 3.35 | | 4.80 | | |
| 17 | | 2.25 | | | | | 5.00 | | | |
| 18 | 2.28 | | 2.55 | | | | | | | 3.10 |
| 19 | | | | | 2.98 | | | | 3.56 | |
| 20 | | | | | | 3.25 | | 5.00 | | |
| 21 | | 2.20 | | | | | 5.20 | | | 3.10 |
| 22 | | | | | 3.00 | | | | 3.52 | |
| 23 | 2.25 | | | | | 3.45 | | | | 3.00 |
| 24 | | | | | 3.02 | | 4.70 | 4.50 | | |
| 25 | | | | | | | | | | |
| 26 | 2.31 | | | | | | | | 3.51 | 3.52 |
| 27 | | | | | | 3.75 | 4.40 | | | |
| 28 | | | | 2.72 | | | | | | |
| 29 | | | | | | | | 4.25 | 3.48 | |
| 30 | 2.25 | | | 2.80 | 3.10 | | | | | 3.10 |
| 31 | | 2.25 | | | | 3.70 | | | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | | 3.00 | | | | | | | 3.7 |
| 2 | 2.99 | | 2.39 | | | 2.7 | | | |
| 3 | | | | | 2.9 | | | | |
| 4 | | 2.96 | | | | | | 2.66 | |
| 5 | | | | | | | | | |
| 6 | | | | 2.1 | | | 2.65 | | |
| 7 | 2.99 | | | | | | | | |
| 8 | | | | | | | | | 3.5 |
| 9 | | | 2.40 | | | 2.69 | | | |
| 10 | 2.95 | | | | 2.69 | | | | |
| 11 | | | | | | | | 2.72 | |
| 12 | | | | | | | | | |
| 13 | | | | 2.4 | | | 2.62 | | |
| 14 | 3.04 | 2.36 | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | 2.35 | | | 2.81 | | | |
| 17 | | | | | 2.69 | | | | |
| 18 | | 2.37 | | | | | | | |
| 19 | | | | | | | | | |
| 20 | 3.02 | | | 2.06 | | | 2.6 | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | 3.6 |
| 23 | | | 2.30 | | | 2.7 | | | |
| 24 | 2.95 | | | | 2.65 | | | | |
| 25 | | 2.35 | | | | | | 2.6 | |
| 26 | | | | | | | | | |
| 27 | | | | 2.95 | | | 2.65 | | |
| 28 | 3.01 | | | | | | | | |
| 29 | | | | | | | | | 3.45 |
| 30 | | | 2.00 | | | 2.72 | | | |
| 31 | | | | | | | | | |

NOTE.—Ice existed at this station to some extent during the winter months, but the relation of gage heights to discharge is not believed to be seriously affected thereby. Observer was unable to reach the gage on account of snow during part of January, February, and March, 1911.

*Daily discharge, in second-feet, of Robinson Creek near Bridgeport, Cal., for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| **1910–11.** | | | | | | | | | | |
| 1 | | 6.3 | 6.2 | | 40 | 70 | 176 | 370 | 295 | 123 |
| 2 | | 7.1 | 6.4 | | 42 | 71 | 182 | 367 | 291 | 120 |
| 3 | | 7.9 | 6.6 | | 44 | 68 | 188 | 363 | 306 | 116 |
| 4 | | 7.6 | 6.8 | | 47 | 64 | 196 | 371 | 324 | 112 |
| 5 | | 7.3 | 7.0 | | 50 | 60 | 205 | 379 | 347 | 107 |
| 6 | | 6.9 | 7.2 | | 52 | 55 | 214 | 387 | 307 | 102 |
| 7 | | 6.6 | 7.3 | | 55 | 51 | 223 | 387 | 232 | 96 |
| 8 | | 6.8 | 7.2 | | 57 | 48 | 232 | 387 | 130 | 90 |
| 9 | | 6.9 | 7.2 | | 57 | 47 | 241 | 387 | 136 | 85 |
| 10 | | 7.0 | 7.1 | | 58 | 63 | 260 | 387 | 145 | 81 |
| 11 | | 7.0 | 7.0 | | 58 | 83 | 270 | 387 | 154 | 78 |
| 12 | | 6.9 | 8.0 | | 58 | 103 | 291 | 387 | 164 | 75 |
| 13 | | 6.8 | 9.0 | | 56 | 123 | 321 | 415 | 160 | 73 |
| 14 | | 6.8 | 10 | | 54 | 117 | 364 | 443 | 156 | 72 |
| 15 | | 6.5 | 12 | | 52 | 111 | 421 | 471 | 153 | 70 |
| 16 | | 6.2 | 14 | | 53 | 106 | 493 | 499 | 150 | 70 |
| 17 | | 6.0 | 16 | | 54 | 102 | 578 | 518 | 147 | 70 |
| 18 | 6.6 | 5.8 | 17 | | 55 | 98 | 620 | 538 | 144 | 70 |
| 19 | 6.5 | 5.5 | | | 56 | 94 | 640 | 558 | 141 | 70 |
| 20 | 6.4 | 5.2 | | | 57 | 91 | 652 | 578 | 139 | 70 |
| 21 | 6.3 | 5.0 | | | 58 | 101 | 660 | 528 | 138 | 70 |
| 22 | 6.1 | 5.1 | | | 58 | 112 | 600 | 478 | 136 | 64 |
| 23 | 6.0 | 5.2 | | | 59 | 123 | 530 | 428 | 136 | 58 |
| 24 | 6.4 | 5.3 | | | 60 | 136 | 461 | 387 | 135 | 76 |
| 25 | 6.8 | 5.4 | | | 61 | 150 | 411 | 364 | 134 | 102 |
| 26 | 7.3 | 5.5 | | | 62 | 165 | 373 | 349 | 134 | 136 |
| 27 | 6.8 | 5.6 | | | 64 | 181 | 353 | 334 | 132 | 114 |
| 28 | 6.3 | 5.7 | | 30 | 66 | 179 | 356 | 320 | 130 | 95 |
| 29 | 5.8 | 5.8 | | 34 | 68 | 176 | 360 | 306 | 128 | 80 |
| 30 | 5.4 | 5.9 | | 37 | 70 | 173 | 365 | 303 | 126 | 70 |
| 31 | | 6.0 | | 38 | | 170 | | 299 | 124 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| **1911–12.** | | | | | | | | | |
| 1 | 64 | 58 | 9.4 | 2.9 | 49 | 27 | 29 | 24 | 170 |
| 2 | 57 | 56 | 9.7 | 3.0 | 48 | 28 | 28 | 24 | 165 |
| 3 | 57 | 54 | 9.7 | 3.2 | 47 | 28 | 27 | 24 | 159 |
| 4 | 57 | 52 | 9.7 | 3.4 | 44 | 28 | 26 | 24 | 152 |
| 5 | 57 | 49 | 9.8 | 3.6 | 41 | 28 | 25 | 25 | 146 |
| 6 | 57 | 44 | 9.8 | 3.8 | 38 | 27 | 24 | 26 | 141 |
| 7 | 57 | 39 | 9.9 | 4.7 | 34 | 27 | 24 | 27 | 136 |
| 8 | 56 | 34 | 10 | 5.6 | 31 | 27 | 24 | 28 | 132 |
| 9 | 54 | 29 | 10 | 6.5 | 29 | 27 | 24 | 29 | 132 |
| 10 | 52 | 24 | 9.8 | 7.4 | 27 | 28 | 23 | 30 | 133 |
| 11 | 53 | 19 | 9.5 | 8.3 | 27 | 30 | 23 | 30 | 134 |
| 12 | 56 | 14 | 9.3 | 9.2 | 27 | 32 | 22 | 30 | 135 |
| 13 | 59 | 10 | 9.1 | 10 | 27 | 34 | 22 | 29 | 137 |
| 14 | 63 | 8.8 | 8.9 | 9.0 | 27 | 36 | 22 | 28 | 139 |
| 15 | 63 | 8.8 | 8.7 | 8.0 | 27 | 37 | 22 | 28 | 141 |
| 16 | 62 | 8.9 | 8.5 | 7.0 | 27 | 38 | 22 | 27 | 142 |
| 17 | 62 | 9.0 | 8.2 | 6.0 | 27 | 36 | 21 | 27 | 143 |
| 18 | 61 | 9.1 | 8.0 | 5.0 | 27 | 35 | 21 | 26 | 144 |
| 19 | 60 | 9.0 | 7.8 | 4.0 | 26 | 34 | 20 | 26 | 145 |
| 20 | 60 | 9.0 | 7.6 | 3.3 | 26 | 33 | 20 | 25 | 147 |
| 21 | 58 | 8.9 | 7.4 | 5.0 | 26 | 31 | 20 | 24 | 149 |
| 22 | 56 | 8.8 | 7.2 | 8.0 | 25 | 30 | 20 | 22 | 150 |
| 23 | 54 | 8.7 | 7.0 | 11 | 25 | 28 | 21 | 22 | 147 |
| 24 | 52 | 8.6 | 6.5 | 17 | 24 | 28 | 22 | 20 | 143 |
| 25 | 54 | 8.5 | 6.0 | 26 | 24 | 28 | 22 | 20 | 140 |
| 26 | 56 | 8.6 | 5.5 | 38 | 24 | 28 | 23 | 25 | 136 |
| 27 | 58 | 8.7 | 5.0 | 52 | 25 | 29 | 24 | 35 | 132 |
| 28 | 59 | 8.8 | 4.3 | 52 | 25 | 29 | 24 | 55 | 128 |
| 29 | 59 | 9.0 | 3.6 | 51 | 26 | 30 | 24 | 80 | 123 |
| 30 | 58 | 9.2 | 2.8 | 50 | | 30 | 24 | 115 | 120 |
| 31 | 58 | | 2.8 | 50 | | 30 | | 155 | |

NOTE.—Daily discharge determined from a rating curve well defined above 150 second-feet. Discharge interpolated for days on which gage was not read except Jan. 19 to Mar. 27, 1911.

*Monthly discharge of Robinson Creek near Bridgeport, Cal., for 1910–1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1910–11.** | | | | | |
| November 18–30 | 7.3 | 5.4 | 6.36 | 164 | C. |
| December | 7.9 | 5 | 6.24 | 384 | C. |
| January 1–18 | 17 | 6.2 | 9 | 322 | C. |
| April | 70 | 40 | 56 | 3,330 | C. |
| May | 181 | 47 | 106 | 6,520 | B. |
| June | 660 | 176 | 374 | 22,300 | B. |
| July | 578 | 290 | 409 | 25,100 | B. |
| August | 347 | 124 | 177 | 10,900 | B. |
| September | 136 | 58 | 87.2 | 5,190 | B. |
| **1911–12.** | | | | | |
| October | 64 | 52 | 57.7 | 3,550 | C. |
| November | 58 | 8.5 | 21.1 | 1,260 | C. |
| December | 10 | 2.8 | 7.79 | 479 | C. |
| January | 52 | 2.9 | 15.3 | 941 | C. |
| February | 49 | 24 | 30.3 | 1,740 | C. |
| March | 38 | 27 | 30.4 | 1,870 | C. |
| April | 29 | 20 | 23.1 | 1,370 | C. |
| May | 155 | 20 | 35.8 | 2,200 | C. |
| June | 170 | 120 | 141 | 8,390 | B. |
| The period | | | | 21,800 | |

## BUCKEYE CREEK NEAR BRIDGEPORT, CAL.

This station, which is located at the mouth of the canyon, one-half mile below Hot Springs, 4½ miles southwest of Bridgeport, in the SE. ¼ NW. ¼ sec. 3, T. 4 N., R. 24 E., in the Mono National Forest, was established November 18, 1910.

Eagle Creek enters about 1 mile above the station. Buckeye Creek is largely used for irrigation, but no water is diverted above the station.

The gage is a vertical staff fastened to a large cottonwood tree on the left bank about one-half mile above the mouth of the canyon.

Discharge measurements are made by wading near the gage.

The right bank is high, but the river overflows the left bank for a short distance at flood stages. The channel, which is composed of gravel and bowlders, is rough. The current is swift at medium and high stages.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of Buckeye Creek near Bridgeport, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-ft.* | 1911. | | *Feet.* | *Sec.-ft.* |
| Nov. 18 | H. D. McGlashan | 2.79 | 27 | July 25 | G. T. Peekema | 3.95 | 238 |
| 1911. | | | | 1912. | | | |
| June 17 | J. E. Stewart | 4.45 | 527 | June 12 | H. J. Tompkins | 3.87 | 170 |

*Daily gage height, in feet, of Buckeye Creek near Bridgeport, Cal., for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | |
| 1 | | | | | | | | 4.40 | | 3.38 |
| 2 | | | | | | 3.31 | | | 3.80 | |
| 3 | | 2.88 | | | | | 3.75 | 4.40 | | |
| 4 | | | 2.79 | | | | | | | |
| 5 | | | | | | | | | 3.75 | |
| 6 | | | | | | | 4.00 | 4.45 | | |
| 7 | | 2.80 | 2.79 | | | | | | | |
| 8 | | | | | 2.99 | | | | 3.68 | |
| 9 | | | | | | 3.40 | | | | |
| 10 | | 2.90 | | | | | 4.10 | | | |
| 11 | | | 2.63 | | | | | | | |
| 12 | | | | | 2.93 | | 4.30 | 4.30 | 3.60 | |
| 13 | | | | | | 3.39 | | | | 3.18 |
| 14 | | 2.60 | | | | | | | | |
| 15 | | | | | 2.90 | | 4.20 | | | 3.12 |
| 16 | | | | | | 3.30 | | 4.35 | | |
| 17 | | 2.72 | | | | | 4.45 | | | |
| 18 | 2.79 | | 2.80 | | | | | | | 3.11 |
| 19 | | | | | 3.06 | | | | 3.50 | |
| 20 | | | | | | 3.46 | | 4.35 | | |
| 21 | | 2.82 | 2.85 | | | | 4.80 | | | 3.10 |
| 22 | | | | | 3.12 | | | | 3.43 | |
| 23 | 2.82 | | | | | 3.80 | | | | 3.10 |
| 24 | | | | | | | 4.40 | 3.95 | | |
| 25 | | | | | 3.40 | | | | | |
| 26 | 2.85 | | | | | | | | 3.38 | 3.50 |
| 27 | | | | | | 3.55 | 4.50 | | | |
| 28 | | | | 2.82 | | | | | | |
| 29 | | | | | 3.25 | | | 4.05 | 3.40 | |
| 30 | 2.71 | | | 2.95 | | | | | | 3.20 |
| 31 | | 2.90 | | | | 3.50 | | | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | | 3.00 | | | | | | | 3.8 |
| 2 | 3.05 | | 2.86 | | | 2.65 | | | |
| 3 | | | | | 2.95 | | | | |
| 4 | | 2.95 | | | | | | 2.82 | |
| 5 | | | | | | | | | |
| 6 | | | | 2.3 | | | 2.7 | | |
| 7 | 3.04 | | | | | | | | |
| 8 | | | | | | | | | 3.9 |
| 9 | | | 2.85 | | | 2.72 | | | |
| 10 | 2.90 | | | | 2.72 | | | | |
| 11 | | | | | | | | 3.1 | |
| 12 | | | | | | | | | |
| 13 | | | | 2.8 | | | 2.6 | | |
| 14 | 3.00 | 2.93 | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | 2.85 | | | 2.8 | | | |
| 17 | | | | | 2.78 | | | | |
| 18 | | 2.92 | | | | | | | |
| 19 | | | | | | | | | |
| 20 | 2.90 | | | 2.8 | | | 2.55 | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | 3.75 |
| 23 | | | 2.85 | | | 2.68 | | | |
| 24 | 2.95 | | | | 2.62 | | | | |
| 25 | | 2.85 | | | | | | 2.95 | |
| 26 | | | | | | | | | |
| 27 | | | | 2.85 | | | 2.8 | | |
| 28 | 2.97 | | | | | | | | |
| 29 | | | | | | | | | 3.5 |
| 30 | | | 2.80 | | | 2.75 | | | |
| 31 | | | | | | | | | |

NOTE.—Ice existed at this station during the winter months but the relation of gage height to discharge is not believed to be seriously affected thereby.

*Daily discharge, in second-feet, of Buckeye Creek near Bridgeport, Cal., for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | |
| 1 | | 27 | 34 | | 38 | 71 | 118 | 480 | 197 | 82 |
| 2 | | 30 | 32 | | 38 | 73 | 136 | 480 | 187 | 80 |
| 3 | | 34 | 30 | | 39 | 75 | 154 | 480 | 182 | 78 |
| 4 | | 33 | 28 | | 39 | 76 | 182 | 504 | 158 | 76 |
| 5 | | 32 | 28 | | 40 | 78 | 210 | 520 | 154 | 74 |
| 6 | | 30 | 28 | | 40 | 80 | 240 | 530 | 148 | 72 |
| 7 | | 29 | 28 | | 41 | 80 | 250 | 510 | 142 | 70 |
| 8 | | 31 | 26 | | 41 | 83 | 268 | 492 | 136 | 68 |
| 9 | | 33 | 24 | | 40 | 85 | 275 | 474 | 132 | 66 |
| 10 | | 35 | 22 | | 39 | 86 | 298 | 456 | 128 | 64 |
| 11 | | 31 | 20 | | 38 | 84 | 355 | 438 | 122 | 62 |
| 12 | | 27 | 22 | | 37 | 84 | 400 | 420 | 118 | 60 |
| 13 | | 23 | 23 | | 36 | 84 | 400 | 429 | 115 | 56 |
| 14 | | 19 | 24 | | 36 | 80 | 375 | 438 | 115 | 55 |
| 15 | | 21 | 25 | | 35 | 76 | 350 | 447 | 112 | 52 |
| 16 | | 23 | 26 | | 39 | 72 | 440 | 465 | 109 | 52 |
| 17 | | 25 | 28 | | 43 | 77 | 530 | 466 | 106 | 51 |
| 18 | 28 | 26 | 29 | | 47 | 82 | 610 | 465 | 103 | 51 |
| 19 | 28 | 27 | 30 | | 47 | 88 | 690 | 465 | 100 | 51 |
| 20 | 29 | 28 | 31 | | 50 | 94 | 770 | 465 | 96 | 50 |
| 21 | 29 | 30 | 32 | | 50 | 118 | 860 | 400 | 93 | 50 |
| 22 | 30 | 30 | | | 52 | 142 | 740 | 340 | 90 | 50 |
| 23 | 30 | 31 | | | 62 | 167 | 610 | 289 | 88 | 50 |
| 24 | 31 | 31 | | | 72 | 154 | 490 | 220 | 86 | 65 |
| 25 | 31 | 32 | | | 85 | 139 | 515 | 229 | 84 | 80 |
| 26 | 32 | 32 | | | 80 | 124 | 540 | 238 | 82 | 100 |
| 27 | 30 | 33 | | | 75 | 109 | 570 | 247 | 83 | 90 |
| 28 | 28 | 33 | | 30 | 70 | 106 | 550 | 256 | 84 | 80 |
| 29 | 26 | 34 | | 34 | 66 | 104 | 530 | 265 | 85 | 70 |
| 30 | 24 | 34 | | 38 | 69 | 102 | 538 | 250 | 84 | 60 |
| 31 | | 35 | | | | 100 | | 232 | 83 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 53 | 42 | 33 | 25 | 38 | 22 | 25 | 30 | 167 |
| 2 | 46 | 41 | 33 | 22 | 37 | 22 | 25 | 30 | 172 |
| 3 | 45 | 39 | 33 | 19 | 38 | 22 | 25 | 30 | 175 |
| 4 | 45 | 38 | 33 | 16 | 38 | 22 | 25 | 30 | 180 |
| 5 | 46 | 38 | 32 | 13 | 36 | 23 | 24 | 33 | 185 |
| 6 | 45 | 38 | 32 | 10 | 34 | 23 | 24 | 36 | 190 |
| 7 | 45 | 38 | 32 | 12 | 32 | 24 | 23 | 39 | 195 |
| 8 | 42 | 38 | 32 | 14 | 30 | 24 | 23 | 42 | 200 |
| 9 | 38 | 37 | 32 | 16 | 27 | 25 | 23 | 45 | 196 |
| 10 | 35 | 37 | 32 | 18 | 26 | 25 | 22 | 48 | 192 |
| 11 | 36 | 37 | 32 | 20 | 25 | 25 | 22 | 50 | 189 |
| 12 | 38 | 37 | 32 | 25 | 26 | 26 | 20 | 50 | 186 |
| 13 | 40 | 37 | 32 | 29 | 26 | 26 | 19 | 49 | 182 |
| 14 | 42 | 37 | 32 | 29 | 27 | 27 | 19 | 48 | 179 |
| 15 | 40 | 37 | 32 | 29 | 27 | 28 | 19 | 47 | 176 |
| 16 | 39 | 36 | 32 | 29 | 28 | 29 | 19 | 46 | 173 |
| 17 | 38 | 36 | 32 | 29 | 28 | 28 | 18 | 45 | 170 |
| 18 | 37 | 36 | 32 | 29 | 27 | 27 | 18 | 44 | 167 |
| 19 | 36 | 36 | 32 | 29 | 25 | 26 | 18 | 43 | 164 |
| 20 | 35 | 36 | 32 | 29 | 24 | 25 | 18 | 42 | 160 |
| 21 | 35 | 34 | 32 | 29 | 23 | 24 | 18 | 41 | 157 |
| 22 | 36 | 34 | 32 | 30 | 22 | 23 | 20 | 40 | 154 |
| 23 | 37 | 33 | 32 | 30 | 21 | 23 | 22 | 39 | 146 |
| 24 | 38 | 32 | 32 | 31 | 20 | 23 | 24 | 38 | 138 |
| 25 | 38 | 32 | 32 | 31 | 20 | 23 | 26 | 38 | 130 |
| 26 | 39 | 32 | 32 | 32 | 20 | 24 | 28 | 48 | 123 |
| 27 | 39 | 32 | 31 | 32 | 20 | 24 | 29 | 60 | 115 |
| 28 | 40 | 32 | 31 | 32 | 21 | 25 | 29 | 75 | 108 |
| 29 | 41 | 32 | 30 | 33 | 21 | 25 | 29 | 93 | 100 |
| 30 | 41 | 33 | 29 | 34 | | 26 | 29 | 114 | 100 |
| 31 | 41 | | 29 | 35 | | 26 | | 120 | |

NOTE.—Daily discharge determined from a fairly well-defined rating curve. Discharge interpolated on which gage was not read except Jan. 22 to Mar. 27, 1911.

*Monthly discharge of Buckeye Creek near Bridgeport, Cal., for 1910–1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1910–11.** | | | | | |
| November 18–30 | 32 | 24 | 29.1 | 748 | [illegible] |
| December | 35 | 30 | 30.1 | 1,840 | [illegible] |
| January 1–21 | 34 | 30 | [illegible] | 1,230 | [illegible] |
| April | 95 | 16 | 40.[illegible] | 2,[illegible] | [illegible] |
| May | 187 | [illegible] | 55.[illegible] | 3,[illegible] | [illegible] |
| June | 900 | 128 | 432 | 25,700 | [illegible] |
| July | 580 | 220 | 400 | 24,300 | [illegible] |
| August | 187 | 42 | [illegible] | 7,[illegible] | [illegible] |
| September | 100 | 30 | 45.[illegible] | 1,[illegible] | [illegible] |
| **1911–12.** | | | | | |
| October | 52 | 16 | 40.[illegible] | 2,470 | [illegible] |
| November | 42 | 22 | 15.[illegible] | 1,[illegible] | [illegible] |
| December | 38 | 25 | 31.[illegible] | 1,900 | [illegible] |
| January | 35 | 21 | 25.[illegible] | 1,570 | [illegible] |
| February | 36 | 20 | [illegible] | 1,[illegible] | [illegible] |
| March | 28 | 22 | 24.[illegible] | 1,[illegible] | [illegible] |
| April | 29 | 2[illegible] | 22.[illegible] | 1,300 | [illegible] |
| May | 130 | 20 | 50.[illegible] | 3,[illegible] | [illegible] |
| June | 200 | 100 | 142 | 8,[illegible] | [illegible] |
| The period | | | | 25,300 | |

## SWAGER CREEK NEAR BRIDGEPORT, CAL.

This station, which is located at the highway bridge three-fourths of a mile northwest of the Mono ranger station, in the NW. ¼ NW. ¼ sec. 23, T. 5 N., R. 24 E., 4½ miles northwest of Bridgeport, was established June 1, 1911.

The gage is a vertical staff on the right bank 20 feet above the bridge.

The bed of the stream is composed of gravel and bowlders.

Discharge measurements are made from the highway bridge.

The relation between gage height and discharge during the winter months is affected by ice.

Gage-height record is furnished by the United States Forest Service.

*Discharge measurements of Swager Creek near Bridgeport, Cal., in 1911–12.*

| Date. | Hydrographer. | Gage height. | Dis-charge. |
|---|---|---|---|
| **1911.** | | *Feet.* | *Sec.-feet.* |
| June 17 | J. E. Stewart | 4.02 | 140 |
| July 25 | G. T. Peekema | 2.88 | 31 |
| **1912.** | | | |
| June 12 | H. J. Tompkins | 2.42 | 11 |

*Daily gage height, in feet, of Swager Creek near Bridgeport, Cal., for 1911–12.*

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept |
|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | 1911. | | | | |
| 1 | 3.60 | 3.38 | | 2.52 | 16 | 4.10 | 3.20 | | |
| 2 | | | | | 17 | 4.02 | | | |
| 3 | | 3.26 | 2.76 | | 18 | | | | 2.50 |
| 4 | | | | | 19 | 4.05 | | 2.60 | 2.46 |
| 5 | 3.90 | | | | 20 | 4.04 | 3.07 | | |
| 6 | | 3.30 | 2.60 | | 21 | | | | |
| 7 | | 3.15 | | | 22 | 3.90 | | 2.58 | |
| 8 | 3.90 | | 2.68 | | 23 | | | | 2.45 |
| 9 | | | | | 24 | | 2.88 | | |
| 10 | | | | | 25 | 3.66 | | 2.50 | 2.52 |
| 11 | | | | | 26 | 3.60 | | | |
| 12 | 4.00 | 3.15 | | | 27 | | | | |
| 13 | | | 2.69 | 2.51 | 28 | | | | |
| 14 | | | | | 29 | | 2.90 | 2.55 | |
| 15 | | | | | 30 | | | | 2.59 |
| | | | | | 31 | | | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 2.52 | 2.52 | | | | | | | 2.5 |
| 2 | | | 2.53 | | | 2.53 | | | |
| 3 | | | | | 2.52 | | | | |
| 4 | | 2.50 | | | | | | 2.52 | |
| 5 | | | | | | | | | |
| 6 | | 2.52 | | 2.2 | | | 2.5 | | |
| 7 | 2.07 | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | 2.35 | | | 2.5 | | | |
| 10 | 2.05 | | | | 2.51 | | | | |
| 11 | | | | | | | | 2.7 | |
| 12 | | | | | | | | | |
| 13 | | 2.38 | | 2.0 | | | 2.2 | | |
| 14 | 2.55 | | | | | | | | |
| 15 | | | | | | | | 2.65 | |
| 16 | 2.52 | | 2.40 | | | 2.57 | | | |
| 17 | | | | | 2.51 | | | | |
| 18 | | 2.38 | | | | | | 2.8 | |
| 19 | 2.52 | | | | | | | | |
| 20 | | | | 2.0 | | | 1.45 | | |
| 21 | 2.55 | | | | | | | | |
| 22 | | | | | | | | | 2.38 |
| 23 | | | 2.46 | | | 2.59 | | | |
| 24 | 2.55 | | | | 2.32 | | | | |
| 25 | | 2.38 | | | | | | 2.6 | |
| 26 | 2.56 | | | | | | | | |
| 27 | | | | 2.41 | | | 2.5 | | |
| 28 | 2.52 | | | | | | | | |
| 29 | | | | | | | | | 2.23 |
| 30 | | | 2.35 | | | 2.45 | | | |
| 31 | | | | | | | | | |

*Daily discharge, in second-feet, of Swager Creek near Bridgeport, Cal., for 1911–12.*

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | 1911. | | | | |
| 1 | 87 | 66 | 27 | 15 | 16 | 151 | 51 | 20 | 14 |
| 2 | 96 | 61 | 26 | 15 | 17 | 139 | 48 | 20 | 14 |
| 3 | 105 | 56 | 25 | 15 | 18 | 142 | 46 | 19 | 14 |
| 4 | 114 | 57 | 22 | 15 | 19 | 144 | 44 | 18 | 12 |
| 5 | 122 | 58 | 20 | 15 | 20 | 142 | 42 | 18 | 12 |
| 6 | 122 | 59 | 18 | 15 | 21 | 132 | 39 | 17 | 12 |
| 7 | 122 | 48 | 20 | 14 | 22 | 122 | 35 | 17 | 12 |
| 8 | 122 | 48 | 21 | 14 | 23 | 112 | 33 | 16 | 12 |
| 9 | 125 | 48 | 21 | 14 | 24 | 108 | 31 | 15 | 13 |
| 10 | 129 | 48 | 21 | 14 | 25 | 94 | 31 | 14 | 15 |
| 11 | 132 | 48 | 22 | 14 | 26 | 87 | 31 | 14 | 15 |
| 12 | 136 | 48 | 22 | 14 | 27 | 82 | 32 | 15 | 16 |
| 13 | 140 | 48 | 22 | 14 | 28 | 78 | 32 | 15 | 16 |
| 14 | 144 | 49 | 21 | 14 | 29 | 74 | 32 | 16 | 17 |
| 15 | 148 | 50 | 21 | 14 | 30 | 70 | 30 | 16 | 18 |
| | | | | | 31 | | 28 | 15 | |

*Daily discharge, in second-feet, of Swauger Creek near Bridgeport, Cal., for 1911-12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| **1911-12.** | | | | | | | | | |
| 1 | 16 | 15 | 14 | [illegible] | 13 | 15 | [illegible] | 15 | [illegible] |
| 2 | 13 | 15 | 15 | 4.1 | 14 | 15 | 13 | 15 | [illegible] |
| 3 | 11 | 15 | 14 | [illegible] | 15 | 15 | [illegible] | [illegible] | [illegible] |
| 4 | 9 | 14 | 13 | [illegible] | 15 | 15 | 14 | [illegible] | [illegible] |
| 5 | 7 | 14 | 12 | [illegible] | 15 | 15 | 14 | 18 | [illegible] |
| 6 | 5 | 15 | 11 | 4.1 | 15 | 15 | 14 | [illegible] | 13 |
| 7 | 3.7 | 14 | 10 | 4.1 | 14 | 14 | 14 | 18 | 13 |
| 8 | 3.6 | 13 | 10 | [illegible] | 14 | 14 | 14 | 18 | 13 |
| 9 | 3.6 | 12 | 9.5 | [illegible] | 14 | 14 | 13 | 20 | 13 |
| 10 | 3.5 | 12 | 10 | [illegible] | 14 | 14 | 12 | [illegible] | 13 |
| 11 | 6 | 10 | 10 | 4.1 | 14 | 14 | 11 | 22 | [illegible] |
| 12 | 10 | 10 | 10 | [illegible] | 14 | [illegible] | 3 | 22 | [illegible] |
| 13 | 13 | 10 | 10 | [illegible] | 14 | [illegible] | 4 | [illegible] | [illegible] |
| 14 | 16 | 10 | 11 | [illegible] | 14 | 14 | 4 | [illegible] | [illegible] |
| 15 | 16 | 10 | 11 | [illegible] | 14 | 14 | [illegible] | 20 | [illegible] |
| 16 | 15 | 10 | 11 | [illegible] | 14 | [illegible] | 4 | 22 | [illegible] |
| 17 | 15 | 10 | 11 | [illegible] | 14 | [illegible] | 3 | 14 | [illegible] |
| 18 | 15 | 10 | 11 | [illegible] | [illegible] | [illegible] | 2 | [illegible] | [illegible] |
| 19 | 15 | 10 | 11 | [illegible] | [illegible] | [illegible] | [illegible] | 18 | [illegible] |
| 20 | 15 | 10 | 12 | [illegible] | 11 | 14 | 4 | 18 | [illegible] |
| 21 | 16 | 10 | 12 | [illegible] | 10 | 15 | 2 | 22 | [illegible] |
| 22 | 16 | 10 | 12 | [illegible] | 10 | 14 | 4 | [illegible] | [illegible] |
| 23 | 16 | 10 | 12 | [illegible] | 9 | 14 | 4 | 20 | 9 |
| 24 | 16 | 10 | 12 | [illegible] | 8.6 | [illegible] | 4 | 19 | 6 |
| 25 | 16 | 10 | 12 | [illegible] | 9 | 14 | 10 | 18 | 6 |
| 26 | 16 | 10 | 11 | 9.1 | 10 | 13 | [illegible] | [illegible] | [illegible] |
| 27 | 16 | 10 | 11 | [illegible] | 11 | 14 | 14 | [illegible] | [illegible] |
| 28 | 15 | 11 | 10 | 11 | 12 | 13 | 14 | 14 | [illegible] |
| 29 | 15 | 12 | 10 | [illegible] | 13 | 12 | 14 | [illegible] | 6.6 |
| 30 | 15 | 13 | 9.5 | [illegible] | ........ | 12 | 14 | 14 | 6.0 |
| 31 | 15 | ........ | 9 | 12 | ........ | 12 | ...... | 14 | ...... |

NOTE.—Daily discharge determined from a rating curve well defined above 5 second-feet. Discharge interpolated for days on which gage was not read. Low discharge during April, 1912, due to use of water for irrigation.

*Monthly discharge of Swauger Creek near Bridgeport, Cal., for 1911-12.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1911.** | | | | | |
| June | 151 | 70 | 117 | 6,960 | B. |
| July | 66 | 28 | 44.7 | 2,750 | B. |
| August | 27 | 14 | 19.2 | 1,180 | B. |
| September | 16 | 12 | 14.3 | 851 | B. |
| **1911-12.** | | | | | |
| October | 16 | 3.5 | 12.3 | 756 | C. |
| November | 15 | 10 | 11.5 | 684 | B. |
| December | 15 | 9 | 11.2 | 689 | C. |
| January | 12 | 3.0 | 6.23 | 383 | C. |
| February | 15 | 8.6 | 12.7 | 730 | B. |
| March | 16 | 12 | 15.3 | 941 | B. |
| April | 14 | 0.0 | 9.27 | 552 | C. |
| May | 27 | 14 | 19.1 | 1,170 | B. |
| June | 14 | 6 | 10.9 | 649 | C. |
| The period | | | | 6,550 | |

## [illegible]

[illegible] measurements have been made on [illegible]:

[illegible] in California.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | Sec.-ft. |
| [illegible] | [illegible] | [illegible] | [illegible], Mono County, Cal. | 45.0 |
| [illegible] | [illegible] | [illegible] | [illegible] below Bridgeport, Cal. | 196 |
| [illegible] | [illegible] | [illegible] | [illegible] below Bridgeport, Cal. | 30.0 |
| [illegible] | [illegible] | [illegible] | [illegible] | 78.0 |
| [illegible] | [illegible] | [illegible] Huffaker | [illegible] end Big Meadow | 294 |
| [illegible] | [illegible] | [illegible] | [illegible] | 179 |
| [illegible] | [illegible] | [illegible] | [illegible] | 56.0 |
| [illegible] | [illegible] | [illegible] | [illegible] above [illegible], Cal. | 417 |
| [illegible] | [illegible] | [illegible] | [illegible], Mono County, Cal. | 72.5 |
| [illegible] | [illegible] | [illegible] | [illegible] Fork, Cal. | 95.0 |
| [illegible] | do | [illegible] | Upper end Antelope Valley [illegible] | 331 |
| [illegible] | do | D. W. Hays | [illegible] | 39.7 |
| [illegible] | do | [illegible] | [illegible] | 49.8 |
| [illegible] | do | do | [illegible] bridge above [illegible] [illegible], Cal. | 222 |
| [illegible] 1903 | do | I. W. Huffaker | Lower end Antelope Valley, [illegible] | 134 |
| [illegible] | do | do | [illegible] | 66.0 |
| [illegible] | do | [illegible] | do | 0 |
| [illegible] | do | [illegible] | [illegible] | 71.0 |
| [illegible] | [illegible] | [illegible] | Above Little Walker | 108 |
| [illegible] | Little Walker River | [illegible] | [illegible], Mono County, Cal. | 39.0 |
| [illegible] | do | [illegible] | [illegible] Junction | 102.0 |
| [illegible] | do | [illegible] Huffaker | [illegible] | 44.0 |
| [illegible] | [illegible] Creek | D. W. Hays | Above all diversions, Cal. | 43.2 |
| [illegible] | do | do | do | 20.0 |
| [illegible] | do | I. W. Huffaker | do | 60.0 |
| [illegible] | do | do | do | 143 |
| [illegible] | do | do | do | 120 |
| Aug. [illegible] | do | do | do | 49 |
| Oct. 7, 1902 | [illegible] Virginia Creek. | D. W. Hays | do | 7.1 |
| Apr. [illegible] | do | I. W. Huffaker | do | 13.3 |
| May [illegible] | do | do | do | 19.3 |
| [illegible] | do | do | do | 14.9 |
| Aug. [illegible] | do | do | [illegible] | 25.0 |
| Oct. [illegible] | Green Creek | D. W. Hays | Above all diversions | 7.1 |
| Apr. [illegible] | do | I. W. Huffaker | do | 28.0 |
| May [illegible] | do | do | do | 78.0 |
| July [illegible] | do | do | do | 63.0 |
| Aug. [illegible] | do | do | do | 29.0 |
| June [illegible] | do | do | Bridgeport, Cal. | 96.0 |
| May [illegible] | [illegible] Creek | do | Above diversions | 15.1 |
| June 23, [illegible] | do | do | do | 30.0 |
| July [illegible] | do | do | do | 7.6 |
| May [illegible] | [illegible] Creek | do | do | 2.8 |
| May [illegible] | [illegible] Creek | do | do | 23.0 |
| May 2, 1903 | do | do | Below sawmill bridge | 16.3 |
| June 9, 1903 | do | do | Below Little Antelope ditches. | 28.0 |
| July [illegible], 1903 | do | do | do | 2.5 |
| July [illegible], 1902 | [illegible] Creek | F. H. Olmsted | | 10.5 |
| Aug. 21, 1902 | Robinson Creek | D. W. Hays | Below Twin Lakes, Cal. | 75.7 |
| Oct. [illegible], 1902 | do | do | do | 24.0 |
| July 11, 1903 | do | I. W. Huffaker | do | 128 |
| Aug. [illegible], 1903 | do | do | do | 53.0 |
| May 28, 1903 | do | do | Above Twin Lakes, Cal. | 60.0 |
| June 6, 1903 | do | do | do | 164 |
| July 6, 1903 | do | do | do | 96.0 |
| Aug. 2, 1903 | do | do | do | 60.0 |
| July 22, 1902 | [illegible] Creek | F. H. Olmsted | | 18.5 |
| Oct. 7, 1902 | [illegible] Creek | D. W. Hays | Above all diversions, Cal. | 4.2 |
| Apr. [illegible], 1903 | do | I. W. Huffaker | do | 8.7 |
| May 30, 1903 | do | do | do | 11.2 |
| July 7, 1903 | do | do | do | 9.2 |
| Aug. 3, 1903 | do | do | Lower end of meadow | .9 |
| Oct. [illegible], 1902 | [illegible] Creek | D. W. Hays | Bridge above Huntoon ranch, Cal. | 5.7 |
| Apr. 30, 1903 | do | I. W. Huffaker | Worthby cabin | 21.0 |
| June 7, 1903 | do | do | do | 17.3 |
| July 11, 1903 | do | do | do | 5.6 |
| | do | do | do | 2.6 |

*Miscellaneous measurements of [illegible] Creek ditches, East Walker River drainage basin, in California, in [illegible].*

[By L. W. [illegible].]

| Date. | Ditch. | Discharge. | Date. | Ditch. | Discharge. |
|---|---|---|---|---|---|
| | | *Second-feet.* | | *Upper North Channel—Con.* | *Second-feet.* |
| Apr. 28 | Benson Barnes | [illegible] | June 2 | Elliot [illegible] | [illegible] |
| May 20 | ......do | [illegible] | 2 | Elliot [illegible] | [illegible] |
| July 8 | ......do | [illegible] | | *Lower North Channel.* | |
| Apr. 28 | Rickey | [illegible] | June 2 | Elliot [illegible] | [illegible] |
| May 20 | ......do | [illegible] | 2 | Elliot [illegible] | [illegible] |
| July 8 | ......do | [illegible] | 2 | Elliot [illegible] | [illegible] |
| Apr. 28 | Severe | [illegible] | 2 | Day and Simpson | [illegible] |
| May 2 | ......do | [illegible] | | *Lower South Channel.* | |
| July 8 | ......do | [illegible] | June 2 | Elliot, Day, and Simpson | [illegible] |
| June 2 | Elliot | [illegible] | July 9 | ......do | [illegible] |
| July 9 | ......do | [illegible] | | | |
| June 2 | Elliot, Day, and Simpson | [illegible] | | | |
| 2 | Whitney Day | [illegible] | | | |
| | *Upper North Channel.* | | | | |
| June 2 | Elliot 1 | [illegible] | | | |
| 2 | Elliot 2 | [illegible] | | | |

*Miscellaneous measurements of Green Creek ditches, East Walker River drainage basin, in California, in [illegible].*

[By L. W. [illegible].]

| Date. | Ditch. | Discharge. | Date. | Ditch. | Discharge. |
|---|---|---|---|---|---|
| | | *Second-feet.* | | | *Second-feet.* |
| June 3 | Dynamo | [illegible] | June 3 | Green Creek No. 2 | [illegible] |
| July 7 | ......do | [illegible] | July 7 | ......do | [illegible] |
| June 3 | Shell | [illegible] | June 4 | Lower Green Creek | [illegible] |
| July 7 | ......do | [illegible] | July 11 | ......do | [illegible] |
| June 3 | Green Creek No. 1 | [illegible] | 11 | ......do | [illegible] |
| July 7 | ......do | [illegible] | | | |

*Miscellaneous measurements of Dogtown Creek ditches, East Walker River drainage basin, in California, in [illegible].*

[By L. W. [illegible].]

| Date. | Ditch. | Discharge. | Date. | Ditch. | Discharge. |
|---|---|---|---|---|---|
| | | *Second-feet.* | | | *Second-feet.* |
| July 7 | Osborne and Kinney | [illegible] | June 3 | Dogtown No. 1 | [illegible] |
| June 3 | Bryant | [illegible] | July 7 | ......do | [illegible] |
| July 11 | ......do | [illegible] | June 3 | Dogtown No. 2 | [illegible] |

*[illegible] in feet, of Rush Creek near Mono Lake, Cal., for 1910–1912*—Contd.

| [illegible] | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] 25 | | | | | | | | | | | |
| [illegible] | | | | | | | | | | | | |
| [illegible] | | | 2.12 | | | | | | | | | |
| [illegible] | | | | | 1.95 | | | | | | | |
| [illegible] | | | | | | | | | | | | |
| [illegible] | | | | | | | | | 3.18 | | | |
| [illegible] | | | | 2.02 | | | | | | | | |
| [illegible] | | | | | | | | | | | | |
| [illegible] | | | | | | | | | | | | |
| [illegible] | | | 2.50 | | | | | | 3.2 | | | |
| [illegible] | | | | | | | | | | | | |

[illegible] Beginning July 6, 1911, gage heights refer to a new gage at an arbitrary datum. On Sept. [illegible], [illegible] datum was raised 0.9 foot.
[illegible] existed at this station during January, 1912. Observer was absent Mar. 13 to June 4, 1912.

## LEEVINING CREEK NEAR MONO LAKE, CAL.

This station, which is located 4 miles south of Mono Lake post office, at the forest ranger station in the SE. ¼ SE. ¼ sec. 17, T. 1 N., R. 26 E., in the Mono Lake National Forest, was established November [illegible] 1910.

Warren Creek, the most important tributary, enters about 5½ miles above the station and 8½ miles above Mono Lake. Less than 100 acres are irrigated in the small valley above the ranger's camp. Practically the entire low-water flow is used for irrigation near the mouth of the creek.

The gage is a vertical staff fastened to a cottonwood tree on the left bank, 250 feet below the ranger's camp.

Discharge measurements are made by wading.

The channel is composed of gravel and small bowlders. Both banks are high and will not overflow.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of Leevining Creek near Mono Lake, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* |
| 1910. | | | |
| Nov. 17 | H. D. McGlashan | 2.16 | 22 |
| 1911. | | | |
| June 18 | J. E. Stewart | 4.55 | 590 |
| July 21 | G. T. Peekema | 3.98 | 323 |
| 1912. | | | |
| June 14 | H. J. Tompkins | 3.15 | 153 |

*Daily gage height, in feet, of [illegible] Creek near [illegible] Lake, [illegible], for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | |
| 1 | ...... | 2.13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] |
| 2 | ...... | 2.22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] |
| 3 | ...... | 2.11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | ...... | 2.12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] |
| 5 | ...... | 2.22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 6 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 7 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 8 | ...... | 2.19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | ...... |
| 9 | ...... | 2.25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | ...... |
| 10 | ...... | 2.21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | ...... |
| 11 | ...... | 2.22 | [illegible] | 2.35 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | ...... | ...... |
| 12 | ...... | 2.21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | ...... | 2.15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.41 | [illegible] | [illegible] | [illegible] |
| 14 | ...... | 2.20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | ...... | 2.16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | ...... | 2.15 | 2.23 | [illegible] | [illegible] | [illegible] | [illegible] | 4.71 | [illegible] | [illegible] | [illegible] |
| 17 | 2.16 | 2.11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | 2.16 | 2.15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | 2.11 | 2.21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | 2.13 | 2.11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 21 | 2.16 | 2.15 | 2.21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 22 | 2.12 | 2.16 | 2.41 | [illegible] | [illegible] | [illegible] | [illegible] | 4.41 | ...... | [illegible] | ...... |
| 23 | 2.15 | 2.16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| 24 | ...... | 2.15 | 2.28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| 25 | 2.11 | 2.13 | 2.23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] |
| 26 | 2.15 | 2.15 | 2.25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | ...... |
| 27 | 2.15 | 2.61 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | ...... |
| 28 | 2.12 | 2.90 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | ...... |
| 29 | 2.13 | 2.70 | 2.32 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | ...... |
| 30 | 2.13 | 2.11 | 2.45 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | 2.35 |
| 31 | ...... | 2.00 | 2.34 | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | June. |
|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | |
| 1 | [illegible] | ...... | ...... | ...... | 2.1 | [illegible] | ...... |
| 2 | [illegible] | 2.16 | ...... | ...... | 2.09 | [illegible] | ...... |
| 3 | [illegible] | 2.19 | ...... | ...... | 2.09 | 2.1 | [illegible] |
| 4 | [illegible] | 2.19 | ...... | ...... | 2.09 | ...... | 3.92 |
| 5 | 2.30 | 2.19 | ...... | ...... | [illegible] | 2.14 | 3.95 |
| 6 | [illegible] | 2.19 | ...... | 2.5 | [illegible] | [illegible] | 4.0 |
| 7 | 2.25 | 2.17 | ...... | 2.1 | [illegible] | [illegible] | 4.1 |
| 8 | 2.27 | 2.15 | ...... | 2.08 | [illegible] | [illegible] | 3.7 |
| 9 | 2.25 | 2.14 | ...... | 2.06 | [illegible] | [illegible] | 3.52 |
| 10 | 2.25 | 2.17 | 2.13 | 2.1 | [illegible] | [illegible] | 3.42 |
| 11 | 2.25 | 2.35 | 2.13 | 2.1 | 2.08 | 2.06 | 3.45 |
| 12 | 2.25 | 2.50 | 2.11 | 2.1 | 2.06 | 2.06 | 3.28 |
| 13 | 2.25 | 2.20 | 2.10 | 2.1 | 2.06 | ...... | 3.3 |
| 14 | ...... | 2.22 | 2.09 | 2.1 | 2.06 | ...... | 3.18 |
| 15 | 2.23 | 2.20 | 2.09 | 2.1 | 2.06 | ...... | 3.18 |
| 16 | 2.22 | 2.19 | 2.08 | 2.1 | 2.06 | ...... | 3.15 |
| 17 | 2.20 | 2.18 | 2.15 | 2.1 | 2.06 | ...... | 3.12 |
| 18 | 2.21 | 2.18 | 2.20 | 2.09 | 2.06 | ...... | 3.18 |
| 19 | 2.20 | 2.18 | 2.30 | 2.09 | 2.07 | ...... | 3.28 |
| 20 | 2.21 | 2.18 | 2.38 | 2.08 | 2.06 | ...... | 3.32 |
| 21 | 2.20 | 2.17 | 2.55 | 2.08 | 2.07 | ...... | 3.13 |
| 22 | ...... | ...... | 2.77 | 2.08 | 2.06 | ...... | 3.02 |
| 23 | 2.20 | ...... | 2.75 | 2.08 | 2.05 | ...... | 2.86 |
| 24 | 2.19 | ...... | 3.00 | 2.08 | 2.05 | ...... | 2.74 |
| 25 | 2.18 | ...... | 3.00 | 2.07 | 2.05 | ...... | 2.72 |
| 26 | 2.18 | ...... | 3.00 | 2.07 | 2.05 | ...... | 2.76 |
| 27 | 2.19 | ...... | 3.00 | 2.07 | 2.06 | ...... | 2.79 |
| 28 | 2.20 | ...... | 3.00 | 2.09 | 2.06 | ...... | 2.85 |
| 29 | ...... | ...... | 3.00 | 2.09 | 2.06 | ...... | 2.84 |
| 30 | 2.20 | ...... | 3.48 | 2.09 | ...... | ...... | 2.86 |
| 31 | 2.20 | ...... | 3.48 | 2.1 | ...... | ...... | ...... |

NOTE.—Relation of gage height to discharge affected by ice during the winter months. No record obtained Mar. 13 to June 2, 1912.

[illegible]

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| | | | | Sec.-ft. |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 196 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | do | [illegible] |
| [illegible] | do | [illegible] | [illegible] | 394 |
| [illegible] | do | do | do | 170 |
| [illegible] | do | do | do | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 417 |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | 331 |
| [illegible] | do | [illegible] | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | 134 |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] | 116 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | [illegible] | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 7.1 |
| [illegible] | do | [illegible] | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | Above all diversions | [illegible] |
| [illegible] | do | [illegible] | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | [illegible] | do | Above diversions | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | [illegible] | do | do | [illegible] |
| [illegible] | [illegible] | do | do | [illegible] |
| [illegible] | do | do | Below [illegible] bridge | [illegible] |
| [illegible] | do | do | Below [illegible] [illegible] | [illegible] |
| [illegible] | do | do | do | 2.5 |
| [illegible] | [illegible] | [illegible] Olmsted | | [illegible] |
| [illegible] | [illegible] | [illegible] W. Hays | Below Twin Lakes, Cal. | [illegible] |
| [illegible] | do | do | do | 24.0 |
| [illegible] | do | [illegible] W. Huffaker | do | [illegible] |
| [illegible] | do | do | do | 53.0 |
| [illegible] | do | do | Above Twin Lakes, Cal. | 60.0 |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | do | 96.0 |
| [illegible] | do | do | do | 60.0 |
| [illegible] | [illegible] | [illegible] Olmsted | | 15.5 |
| [illegible] | [illegible] | [illegible] W. Hays | Above all diversions, Cal. | 4.2 |
| [illegible] | do | [illegible] W. Huffaker | do | [illegible] |
| [illegible] | do | do | do | 11.2 |
| [illegible] | do | do | do | 9.2 |
| [illegible] | do | do | Lower end of meadow | [illegible] |
| [illegible] | [illegible] | [illegible] W. Hays | Bridge above Huntoon ranch, Cal. | [illegible] |
| [illegible] | do | [illegible] W. Huffaker | Worthing cabin | [illegible] |
| [illegible] | do | do | do | 17.3 |
| [illegible] | do | do | do | 3.6 |
| [illegible] | do | do | do | 2.6 |

*Miscellaneous measurements of Buckeye Creek ditches, East Walker River drainage basin in California, in 1903.*

[By I. W. [illegible].]

| Date. | | Ditch. | Discharge. | Date. | | Ditch. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | | *Second-feet.* | | | *Upper North Channel—Con.* | *Second-feet.* |
| Apr. | 28 | Reason Barnes | 1.8 | | | | |
| May | 29 | .....do | 20.0 | June | 2 | Elliot 3 | [illegible] |
| July | 8 | .....do | 13.7 | | 2 | Elliot 4 | [illegible] |
| Apr. | 28 | Rickey | 16.4 | | | *Lower North Channel.* | |
| May | 29 | .....do | 25.0 | | | | |
| July | 8 | .....do | 22.0 | June | 2 | Elliot [illegible] | [illegible] |
| Apr. | 28 | Severe | 7.0 | | 2 | Elliot 2 | [illegible] |
| May | 2 | .....do | 24.0 | | 2 | Elliot [illegible] | [illegible] |
| July | 8 | .....do | 2[illegible] | | 2 | Day and Simpson | [illegible] |
| June | 2 | Elliot | 11.4 | | | | |
| July | 9 | .....do | 7.2 | | | *Lower South Channel.* | |
| June | 2 | Elliot, Day, and Simpson | 4.8 | | | | |
| | 2 | Whitney Day | 5.6 | June | 2 | Elliot, Day, and Simpson | [illegible] |
| | | *Upper North Channel.* | | July | 9 | .....do | [illegible] |
| June | 2 | Elliot 1 | [illegible] | | | | |
| | 2 | Elliot 2 | [illegible] | | | | |

*Miscellaneous measurements of Green Creek ditches, East Walker River drainage basin in California, in 1903.*

[By I. W. [illegible].]

| Date. | | Ditch. | Discharge. | Date. | | Ditch. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | | *Second-feet.* | | | | *Second-feet.* |
| June | 3 | Dynamo | [illegible] | June | [illegible] | Green Creek No. [illegible] | [illegible] |
| July | 7 | .....do | [illegible] | July | [illegible] | .....do | [illegible] |
| June | 3 | Shell | [illegible] | June | 4 | Lower Green Creek | [illegible] |
| July | 7 | .....do | [illegible] | July | [illegible] | .....do | [illegible] |
| June | 3 | Green Creek No. 1 | [illegible] | | [illegible] | .....do | [illegible] |
| July | 7 | .....do | [illegible] | | | | |

*Miscellaneous measurements of Dogtown Creek ditches, East Walker River drainage basin in California, in 1903.*

[By I. W. [illegible].]

| Date. | | Ditch. | Discharge. | Date. | | Ditch. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | | *Second-feet.* | | | | *Second-feet.* |
| July | 7 | Osborne and Kinney | [illegible] | June | [illegible] | Dogtown Co. | [illegible] |
| June | 3 | Bryant | | July | [illegible] | .....do | [illegible] |
| July | 11 | .....do | [illegible] | June | [illegible] | Dogtown Co. | [illegible] |

*Miscellaneous measurements of Antelope Valley ditches, West Walker River drainage basin in California, in 1903.*

[By I. W. Huffaker.]

| Date. | Ditch. | Discharge. | Date. | Ditch. | Discharge. |
|---|---|---|---|---|---|
| | | *Second-feet.* | | | *Second-feet.* |
| May 1 | Taylor | 23 | May 4 | Kirman and Rickey | 53.0 |
| June 8 | do | 25 | June 11 | do | 42.0 |
| May 1 | Hardy | 3.3 | July 15 | do | 34.0 |
| June 9 | do | .0 | May 4 | Larsen | .0 |
| July 16 | do | .0 | June 11 | do | 23.0 |
| May 1 | West Goodnow | 6.8 | July 15 | do | 22.0 |
| June 9 | do | 18.0 | May 4 | Gullickson | .0 |
| July 16 | do | 8.7 | June 11 | do | 11.1 |
| May 1 | Chichester No. 1 | 3.3 | July 5 | do | .4 |
| June 9 | do | 1.8 | May 4 | W. W. Co. or slough | 34.0 |
| July 16 | do | .0 | June 11 | do | 75.0 |
| May 1 | Chichester No. 2 | .0 | July 15 | do | 60.0 |
| June 9 | do | .0 | May 4 | Eggleston | .0 |
| July 16 | do | .0 | July 16 | do | .0 |
| May 1 | Coleville No. 2 | 4.9 | May 4 | Powell | .0 |
| June 9 | do | 4.2 | June 11 | do | 9.7 |
| July 16 | do | 2.9 | July 16 | do | 4.1 |
| May 1 | Tunnel and Alkali | 6.8 | May 4 | Goodnow No. 1 | .0 |
| June 9 | do | 30.0 | June 11 | do | 7.2 |
| July 16 | do | 25.0 | July 16 | do | .0 |
| May 1 | Swauger | 11.3 | May 4 | Goodnow No. 2 | .0 |
| June 9 | do | 50.0 | June 11 | do | 12.6 |
| July 16 | do | 53.0 | July 16 | do | .0 |
| May 2 | Wiley | 15.2 | May 2 | Lancaster | .0 |
| June 9 | do | 34.0 | June 11 | do | 15.8 |
| May 4 | Carney | .0 | 11 | Pitts and Radley | 7.7 |
| June 11 | do | 7.2 | July 17 | do | .0 |
| July 15 | do | 6.3 | | | |

*Miscellaneous measurements of Lost Canyon Creek ditches, West Walker River drainage basin in California, in 1903.*

[By I. W. Huffaker.]

| Date. | Ditch. | Discharge. | Date. | Ditch. | Discharge. |
|---|---|---|---|---|---|
| | | *Second-feet.* | | | *Second-feet.* |
| May 2 | Allard and Rickey | .0 | July 14 | McKay and Rickey | 3.2 |
| July 14 | do | 5.1 | June 9 | Shields | 2.2 |
| May 2 | McKay and Rickey | 1.5 | | | |

## MONO LAKE BASIN.

### RUSH CREEK NEAR MONO LAKE, CAL.

This station, which is located in the NE. ¼ sec. 13, T. 1 N., R. 26 E., at the highway bridge 8 miles southeast of Mono Lake post office, one-forth mile above the mouth of the creek, was established November 16, 1910.

The gage was a vertical staff fastened to a cottonwood tree on the right bank 3 feet above the bridge from which discharge measurements are made. It was washed out June 24, 1911, and reset at a new location and arbitrary datum. On September 15, 1911, the gage was reset with its datum 0.9 foot above that of July 6, 1911.

The channel is composed of sand and gravel and may shift at high stages.

The station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of Rush Creek near Mono Lake, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* | | | *Feet.* | *Sec.-ft.* |
| 1910. Nov. 16 | H. D. McGlashan | 2.82 | 41 | 1911. July 22 | G. T. Peeksma | 4.80 | 697 |
| 1911. June 18 | J. E. Stewart | 8.45 | 1,190 | 1912. June 14 | H. J. Tompkins | 4.20 | 323 |

*Daily gage height, in feet, of Rush Creek near Mono Lake, Cal., for 1910–1912.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | | | |
| 1 | | | | | | | 3.40 | | | | | |
| 2 | | | | | | | | | | | | 2.6 |
| 3 | | | | | | | | | 6.32 | | | |
| 4 | | | | 2.73 | 3.68 | 3.50 | | | | | | |
| 5 | | | | | | | | | | | 3.7 | |
| 6 | | | 2.90 | | | | | 6.36 | | 5.5 | | |
| 7 | | | | | | | | | | | | |
| 8 | | | 2.90 | | | | 4.10 | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | 2.85 | | | | | | 6.96 | | | |
| 11 | | | | 2.82 | 2.83 | | | | | | | |
| 12 | | | 2.92 | | | | | | | 5.35 | 3.35 | |
| 13 | | | | | | | | 6.30 | | | | 2.35 |
| 14 | | | 2.95 | | | | | | | | | |
| 15 | | | | | | | 5.35 | | | | | 2.38 |
| 16 | | 2.82 | 3.00 | | | | | | | | | |
| 17 | | | 3.00 | | | | | | 7.80 | | | |
| 18 | | | | | 2.91 | 2.75 | | | | | | |
| 19 | | | 2.90 | | | | | | | | | |
| 20 | | | | | | | | 6.12 | | | | |
| 21 | | | 2.98 | 3.00 | | | | | | 5.2 | 2.95 | |
| 22 | | | | | | | 5.69 | | | | | |
| 23 | | | 2.80 | | | | | | | | | |
| 24 | | | | | | | | | | | | |
| 25 | | | 2.75 | | 3.40 | 3.23 | | | | | | 2.45 |
| 26 | | | | | | | | | | | | |
| 27 | | | 2.75 | | | | | 6.74 | | | | |
| 28 | | | | 2.99 | | | | | | | | |
| 29 | | | 2.75 | | | | 6.10 | | | 4.1 | | |
| 30 | | | | | | | | | | | | |
| 31 | | | 2.80 | | | | | | | | | |
| 1911-12. | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | |
| 2 | 2.38 | | | | | 2.06 | | | | | | |
| 3 | | | | | 2.01 | | | | | | | |
| 4 | | 2.26 | | | | | | | | | | |
| 5 | | | | | | | | | 5.32 | | | |
| 6 | 2.31 | | | 2.4 | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | 2.08 | | | | | | |
| 10 | | | | | 2.04 | | | | 4.53 | | | |
| 11 | | 2.28 | 2.08 | | | | | | | | | |
| 12 | 2.30 | | | | | | | | | | | |
| 13 | | | | 2.12 | | | | | | | | |
| 14 | | | | | | | | | 4.2 | | | |
| 15 | 2.25 | | | | | | | | | | | |
| 16 | | | 2.08 | | | | | | | | | |
| 17 | | | | | 2.05 | | | | | | | |
| 18 | | | | | | | | | | | | |
| 19 | | 2.20 | | | | | | | 4.0 | | | |
| 20 | | | | 2.08 | | | | | | | | |

[illegible]

[illegible]

This station, which is located [illegible] miles south of Mono Lake post office, at the [illegible] ranger station in the SE. ¼ SE. ¼ sec. [illegible], T. [illegible] N., R. [illegible] E., in the Mono Lake National Forest, was established November [illegible].

[illegible] Creek, the most important tributary, enters about [illegible] miles above the station and [illegible] miles above Mono Lake. Less than [illegible] acres are irrigated in the small valley above the ranger's camp. Practically the entire low-water flow is used for irrigation near the mouth of the creek.

The gage is a vertical staff fastened to a cottonwood tree on the [illegible] bank [illegible] feet [illegible] the ranger's camp.

Discharge measurements are made by wading.

The channel is composed of gravel and small bowlders. Both banks are high and will not overflow.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of [illegible] Creek near Mono Lake, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | Feet. | Sec.-ft. |
| [illegible] | [illegible] McGlashan | 2.[illegible]6 | [illegible] |
| [illegible] | [illegible] | 4.35 | [illegible] |
| [illegible] | [illegible] | 1.[illegible]8 | [illegible] |
| [illegible] | [illegible] | 1.15 | 153 |

*Daily gage height, in feet, of Leevining Creek near Mono Lake, Cal., for 1910-1912.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | | |
| 1 | ...... | 2.13 | 3.10 | 2.25 | 2.45 | 2.35 | 2.60 | 2.90 | 4.10 | ...... | 2.68 |
| 2 | ...... | 2.12 | 2.79 | 2.37 | 2.50 | 2.36 | 2.60 | 3.00 | 4.15 | ...... | 2.65 |
| 3 | ...... | 2.11 | 2.15 | 2.41 | 2.19 | 2.38 | 2.62 | 3.24 | 4.20 | 3.30 | 2.60 |
| 4 | ...... | 2.12 | 2.25 | 2.48 | 2.15 | 2.37 | 2.66 | 3.45 | 4.30 | ...... | 2.58 |
| 5 | ...... | 2.22 | 2.21 | 2.47 | 2.14 | 2.35 | 2.63 | 3.55 | 4.50 | 3.15 | ...... |
| 6 | ...... | 2.20 | 2.08 | 2.48 | 2.15 | 2.38 | 2.72 | 3.80 | 4.70 | 3.10 | ...... |
| 7 | ...... | 2.20 | 2.08 | 2.83 | 2.21 | 2.39 | 2.74 | 3.60 | 4.75 | 3.00 | ...... |
| 8 | ...... | 2.19 | 2.07 | 2.85 | 2.35 | 2.41 | 2.72 | 3.50 | ...... | 3.05 | ...... |
| 9 | ...... | 2.18 | 2.10 | 2.35 | 2.51 | 2.40 | 2.71 | 3.55 | ...... | 3.00 | ...... |
| 10 | ...... | 2.21 | 2.16 | 2.31 | 2.52 | 2.38 | 2.69 | 3.85 | ...... | 3.10 | ...... |
| 11 | ...... | 2.22 | 2.99 | 2.25 | 2.20 | 2.38 | 2.69 | 4.00 | ...... | ...... | ...... |
| 12 | ...... | 2.21 | 2.85 | 2.27 | 2.28 | 2.35 | 2.71 | 4.15 | 4.25 | 3.00 | 2.38 |
| 13 | ...... | 2.15 | 3.10 | 2.34 | 2.38 | 2.34 | 2.74 | 4.40 | 4.35 | 2.90 | 2.35 |
| 14 | ...... | 2.20 | 3.60 | 2.71 | 2.29 | 2.32 | 2.72 | 4.30 | 4.60 | 2.85 | 2.35 |
| 15 | ...... | 2.18 | 2.11 | 2.71 | 2.18 | 2.30 | 2.70 | 4.40 | 4.80 | 2.80 | 2.35 |
| 16 | ...... | 2.15 | 2.23 | 2.75 | 2.13 | 2.31 | 2.68 | 4.70 | 4.40 | 2.85 | 2.35 |
| 17 | 2.16 | 2.11 | 2.94 | 3.11 | 2.18 | 2.31 | 2.66 | 4.75 | 4.40 | 2.85 | 2.35 |
| 18 | 2.16 | 2.15 | 3.41 | 3.31 | 2.17 | 2.33 | 2.63 | 4.85 | 4.50 | 2.80 | 2.35 |
| 19 | 2.11 | 2.21 | 3.01 | 2.25 | 2.19 | 2.32 | 2.64 | 4.90 | 4.25 | 2.75 | 2.35 |
| 20 | 2.13 | 2.11 | 2.35 | 2.41 | 2.17 | 2.35 | 2.71 | 4.85 | 4.20 | 2.73 | ...... |
| 21 | 2.16 | 2.15 | 2.31 | 2.71 | 2.16 | 2.37 | 2.82 | 4.80 | 4.00 | 2.80 | ...... |
| 22 | 2.12 | 2.16 | 2.41 | 2.16 | 2.16 | 2.41 | 2.90 | 4.40 | ...... | 2.75 | ...... |
| 23 | 2.15 | 2.16 | 2.26 | 2.17 | 2.17 | 2.42 | 3.11 | 4.20 | ...... | 2.70 | 2.38 |
| 24 | ...... | 2.15 | 2.28 | 2.15 | 2.19 | 2.50 | 3.18 | 3.90 | ...... | 2.70 | 2.35 |
| 25 | 2.11 | 2.13 | 2.23 | 2.18 | 2.21 | 2.54 | 3.30 | 3.75 | 3.40 | ...... | 2.38 |
| 26 | 2.15 | 2.15 | 2.25 | 2.91 | 2.22 | 2.57 | 3.05 | 4.00 | 3.40 | ...... | ...... |
| 27 | 2.15 | 2.61 | 2.31 | 2.21 | 2.20 | 2.60 | 2.98 | 4.35 | 3.40 | ...... | ...... |
| 28 | 2.12 | 2.90 | 2.37 | 2.72 | 2.21 | 2.59 | 3.01 | 4.65 | 3.45 | ...... | ...... |
| 29 | 2.13 | 2.70 | 2.32 | ...... | 2.25 | 2.58 | 3.03 | 4.45 | 3.40 | ...... | ...... |
| 30 | 2.13 | 2.11 | 2.45 | ...... | 2.31 | 2.58 | 3.00 | 4.20 | 3.45 | ...... | 2.35 |
| 31 | ...... | 2.60 | 2.34 | ...... | 2.30 | ...... | 2.95 | ...... | 3.40 | 2.65 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | June. |
|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | |
| 1 | 2.33 | ...... | ...... | ...... | 2.1 | 2.05 | ...... |
| 2 | 2.32 | 2.18 | ...... | ...... | 2.09 | 2.04 | ...... |
| 3 | 2.30 | 2.19 | ...... | ...... | 2.09 | 2.1 | 3.8 |
| 4 | 2.32 | 2.19 | ...... | ...... | 2.09 | ...... | 3.92 |
| 5 | 2.30 | 2.19 | ...... | ...... | 2.08 | 2.14 | 3.95 |
| 6 | 2.30 | 2.19 | ...... | 2.5 | 2.08 | 2.06 | 4.0 |
| 7 | 2.28 | 2.17 | ...... | 2.1 | 2.08 | 2.06 | 4.1 |
| 8 | 2.27 | 2.15 | ...... | 2.08 | 2.08 | 2.06 | 3.7 |
| 9 | 2.25 | 2.14 | ...... | 2.08 | 2.08 | 2.06 | 3.52 |
| 10 | 2.25 | 2.17 | 2.13 | 2.1 | 2.08 | 2.06 | 3.42 |
| 11 | 2.25 | 2.35 | 2.13 | 2.1 | 2.08 | 2.06 | 3.45 |
| 12 | 2.25 | 2.50 | 2.11 | 2.1 | 2.08 | 2.06 | 3.28 |
| 13 | 2.25 | 2.20 | 2.10 | 2.1 | 2.06 | ...... | 3.3 |
| 14 | ...... | 2.22 | 2.09 | 2.1 | 2.06 | ...... | 3.18 |
| 15 | 2.23 | 2.20 | 2.09 | 2.1 | 2.06 | ...... | 3.18 |
| 16 | 2.22 | 2.19 | 2.08 | 2.1 | 2.08 | ...... | 3.15 |
| 17 | 2.20 | 2.18 | 2.15 | 2.1 | 2.08 | ...... | 3.12 |
| 18 | 2.21 | 2.18 | 2.20 | 2.09 | 2.08 | ...... | 3.18 |
| 19 | 2.20 | 2.18 | 2.30 | 2.09 | 2.07 | ...... | 3.28 |
| 20 | 2.21 | 2.18 | 2.38 | 2.08 | 2.08 | ...... | 3.32 |
| 21 | 2.20 | 2.17 | 2.55 | 2.08 | 2.07 | ...... | 3.13 |
| 22 | ...... | ...... | 2.77 | 2.08 | 2.06 | ...... | 3.02 |
| 23 | 2.20 | ...... | 2.75 | 2.08 | 2.05 | ...... | 2.86 |
| 24 | 2.19 | ...... | 3.00 | 2.08 | 2.05 | ...... | 2.74 |
| 25 | 2.18 | ...... | 3.00 | 2.07 | 2.05 | ...... | 2.72 |
| 26 | 2.18 | ...... | 3.00 | 2.07 | 2.05 | ...... | 2.76 |
| 27 | 2.19 | ...... | 3.00 | 2.07 | 2.06 | ...... | 2.79 |
| 28 | 2.20 | ...... | 3.00 | 2.09 | 2.06 | ...... | 2.85 |
| 29 | ...... | ...... | 3.00 | 2.09 | 2.06 | ...... | 2.84 |
| 30 | 2.20 | ...... | 3.48 | 2.09 | ...... | ...... | 2.86 |
| 31 | 2.20 | ...... | 3.48 | 2.1 | ...... | ...... | ...... |

NOTE.—Relation of gage height to discharge affected by ice during the winter months. No re obtained Mar. 13 to June 2, 1912.

*Daily discharge, in second-feet, of Leevining Creek near Mono Lake, Cal., for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | |
| 1 | ........ | 22 | 20 | 20 | 25 | 38 | 65 | 108 | 390 | 193 | 76 |
| 2 | ........ | 21 | 20 | 40 | 24 | 39 | 65 | 123 | 408 | 186 | 72 |
| 3 | ........ | 20 | 20 | 44 | 24 | 41 | 68 | 168 | 465 | 180 | 65 |
| 4 | ........ | 21 | 20 | 51 | 22 | 40 | 73 | 210 | 465 | 165 | 63 |
| 5 | ........ | 27 | 20 | 50 | 22 | 38 | 69 | 232 | 550 | 150 | 60 |
| 6 | ........ | 25 | 20 | 51 | 22 | 41 | 82 | 298 | 648 | 140 | 57 |
| 7 | ........ | 25 | 20 | 46 | 26 | 42 | 85 | 245 | 673 | 123 | 54 |
| 8 | ........ | 24 | 20 | 42 | 26 | 44 | 82 | 220 | 627 | 132 | 51 |
| 9 | ........ | 24 | 20 | 38 | 26 | 43 | 80 | 232 | 581 | 123 | 48 |
| 10 | ........ | 26 | 20 | 34 | 25 | 41 | 78 | 312 | 536 | 140 | 45 |
| 11 | ........ | 27 | 20 | 29 | 25 | 41 | 78 | 356 | 491 | 132 | 43 |
| 12 | ........ | 26 | 20 | 31 | 31 | 38 | 80 | 408 | 446 | 123 | 41 |
| 13 | ........ | 22 | 20 | 37 | 41 | 37 | 85 | 507 | 486 | 108 | 38 |
| 14 | ........ | 25 | 20 | 35 | 32 | 35 | 82 | 465 | 598 | 100 | 38 |
| 15 | ........ | 24 | 20 | 32 | 24 | 33 | 79 | 507 | 698 | 93 | 38 |
| 16 | ........ | 22 | 20 | 31 | 22 | 34 | 76 | 648 | 507 | 100 | 38 |
| 17 | 23 | 20 | 20 | 30 | 24 | 34 | 73 | 673 | 507 | 100 | 38 |
| 18 | 23 | 22 | 20 | 29 | 24 | 36 | 69 | 724 | 550 | 93 | 38 |
| 19 | 20 | 21 | 20 | 29 | 24 | 35 | 71 | 750 | 446 | 86 | 38 |
| 20 | 22 | 20 | 38 | 27 | 24 | 38 | 80 | 724 | 426 | 83 | 38 |
| 21 | 23 | 22 | 34 | 25 | 23 | 40 | 96 | 698 | 356 | 93 | 39 |
| 22 | 21 | 23 | 44 | 23 | 23 | 44 | 108 | 507 | 317 | 86 | 40 |
| 23 | 22 | 23 | 30 | 24 | 24 | 45 | 142 | 426 | 278 | 79 | 41 |
| 24 | 21 | 22 | 31 | 22 | 24 | 53 | 156 | 326 | 239 | 79 | 38 |
| 25 | 20 | 22 | 27 | 24 | 26 | 58 | 180 | 284 | 200 | 78 | 41 |
| 26 | 22 | 22 | 29 | 25 | 27 | 61 | 132 | 356 | 200 | 77 | 41 |
| 27 | 22 | 21 | 34 | 26 | 25 | 65 | 120 | 486 | 200 | 76 | 40 |
| 28 | 21 | 21 | 40 | 25 | 26 | 64 | 126 | 623 | 210 | 75 | 39 |
| 29 | 22 | 20 | 35 | ........ | 29 | 63 | 128 | 528 | 200 | 74 | 38 |
| 30 | 22 | 20 | 48 | ........ | 34 | 63 | 123 | 426 | 210 | 73 | 38 |
| 31 | ........ | 20 | 37 | ........ | 33 | ........ | 116 | ........ | 200 | 72 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | June. |
|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | |
| 1 | 36 | 24 | 23 | 20 | 20 | 18 | ........ |
| 2 | 35 | 24 | 23 | 20 | 20 | 17 | ........ |
| 3 | 33 | 24 | 23 | 20 | 20 | 20 | 298 |
| 4 | 35 | 24 | 23 | 20 | 20 | 21 | 332 |
| 5 | 33 | 24 | 23 | 20 | 19 | 22 | 341 |
| 6 | 33 | 24 | 23 | 20 | 19 | 18 | 356 |
| 7 | 31 | 24 | 23 | 20 | 19 | 18 | 391 |
| 8 | 31 | 22 | 23 | 19 | 19 | 18 | 270 |
| 9 | 29 | 22 | 23 | 19 | 19 | 18 | 225 |
| 10 | 29 | 24 | 22 | 20 | 19 | 18 | 204 |
| 11 | 29 | 38 | 22 | 20 | 19 | 18 | 210 |
| 12 | 29 | 53 | 20 | 20 | 19 | 18 | 176 |
| 13 | 29 | 25 | 20 | 20 | 18 | ........ | 180 |
| 14 | 28 | 27 | 20 | 20 | 18 | ........ | 156 |
| 15 | 27 | 25 | 20 | 20 | 18 | ........ | 156 |
| 16 | 27 | 24 | 19 | 20 | 19 | ........ | 150 |
| 17 | 25 | 24 | 20 | 20 | 19 | ........ | 142 |
| 18 | 26 | 24 | 20 | 20 | 19 | ........ | 156 |
| 19 | 25 | 24 | 20 | 20 | 18 | ........ | 176 |
| 20 | 26 | 24 | 20 | 19 | 19 | ........ | 184 |
| 21 | 25 | 24 | 20 | 19 | 18 | ........ | 146 |
| 22 | 25 | 24 | 20 | 19 | 18 | ........ | 126 |
| 23 | 25 | 24 | 20 | 19 | 18 | ........ | 102 |
| 24 | 24 | 24 | 20 | 19 | 18 | ........ | 85 |
| 25 | 24 | 24 | 20 | 18 | 18 | ........ | 82 |
| 26 | 24 | 24 | 20 | 18 | 18 | ........ | 87 |
| 27 | 24 | 24 | 20 | 18 | 18 | ........ | 92 |
| 28 | 25 | 24 | 20 | 20 | 18 | ........ | 100 |
| 29 | 25 | 24 | 20 | 20 | 18 | ........ | 99 |
| 30 | 25 | 24 | 20 | 20 | ........ | ........ | 102 |
| 31 | 25 | ........ | 20 | 20 | ........ | ........ | ........ |

NOTE.—Daily discharge determined from a fairly well defined rating curve. Discharge estimated Dec. 19, 27–29, and 31, 1910; Feb. 7, 8, 14–18, 20, 21, 26, and 28, Mar. 1, 2, and 8–10, 1911; and Jan. 1 to 6, 1912. Discharge interpolated for days on which gage was not read except Mar. 13 to June 2, 1912.

*Monthly discharge of Leevining Creek near Mono Lake, Cal., for 1910–1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1910–11.** | | | | | |
| November 17–30 | 23 | 20 | 21.7 | 603 | B. |
| December | 27 | 20 | 22.6 | 1,390 | B. |
| January | 48 | ........ | 26.0 | 1,600 | C. |
| February | 51 | 22 | 33.2 | 1,840 | C. |
| March | 41 | 22 | 26.0 | 1,600 | B. |
| April | 65 | 33 | 44.1 | 2,620 | B. |
| May | 180 | 65 | 95.0 | 5,840 | B. |
| June | 750 | 108 | 419 | 24,900 | B. |
| July | 698 | 200 | 423 | 26,000 | B. |
| August | 193 | 72 | 110 | 6,760 | B. |
| September | 76 | 38 | 45.8 | 2,730 | C. |
| The period | ........ | ........ | ........ | 75,900 | |
| **1911–12.** | | | | | |
| October | 36 | 24 | 28.0 | 1,720 | B. |
| November | 53 | 22 | 25.5 | 1,520 | C. |
| December | ........ | ........ | 21.0 | 1,290 | D. |
| January | ........ | ........ | 19.6 | 1,210 | C. |
| February | 20 | 18 | 18.7 | 1,080 | B. |
| March 1-12 | 22 | 17 | 18.7 | 445 | B. |
| June 3-30 | 391 | 82 | 183 | 10,200 | B. |

## MISCELLANEOUS MEASUREMENTS.

The following measurements have been made on creeks and ditches in the Mono Lake basin.

*Miscellaneous measurements in Mono Lake drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| July 29, 1902 | Mill Creek | Below Lundy Lake, above all diversions | 46.7 |
| July 22, 1911 | .....do | 1½ miles above Lundy Lake | 146 |
| June 16, 1912 | .....do | At Lundy | 65 |
| July 22, 1911 | Lake Canyon Creek | Mouth, at Lundy | 2.8 |
| July 30, 1902 | Leevining Creek | Above Rhinedollar Lake | 89 |
| July 22, 1907 | .....do | Road crossing near lake | 248 |
| Aug. 1, 1902 | Rush Creek | Above Silver Lake | 62.4 |
| July 22, 1907 | .....do | Road crossing near lake | 430 |
| July 22, 1911 | .....do | Above Parker and Walker creeks | 641 |
| Aug. 1, 1902 | Parker Creek | ........ | 21.6 |
| July 22, 1911 | .....do | ½ mile south of Farrington | 45 |
| Aug. 1, 1902 | Walker Creek | East of Bloody Canyon | 26.4 |
| July 23, 1911 | .....do | Farrington | 11 |

## OWENS LAKE BASIN.

### SPECIAL COOPERATION.

In the fall of 1903 stations were established on five or six of the principal streams in Owens Valley and on numerous diversion canals used for irrigation. After the city of Los Angeles had acquired its extensive holdings in the valley and had taken active steps to utilize the flow of Owens River and tributaries for a municipal water supply, many other stations were established at the request of and in cooperation with the city. Since that time all stations in Owens Valley have been maintained in cooperation with the city of Los Angeles.

All stations in Owens Valley except those on Owens River are near the western margin of the valley, and most of them are below the delta fans, which extend eastward from the mouths of the canyons and are above all diversions. Nearly all measurements are made from footbridges or by wading. The current is swift at almost every station, and the channel is subject to more or less change.

### OWENS LAKE NEAR OLANCHA, CAL.

This station was first established in March, 1908, near the old Smith ranch. The gage, which was a 2-inch by 6-inch pine board, was submerged in the early part of July, 1911, and a new gage set at the same location. During September, 1911, the gage was washed out and the station was moved to a point 1 mile north of Brier, where a gage was installed November 1, 1911. Gage heights represent elevation of water surface above sea level.

*Elevation of Owens Lake near Olancha, Cal., 1908–1911.*

| Date. | Elevation of water surface. | Date. | Elevation of water surface. |
|---|---|---|---|
| 1908. | *Feet.* | 1911. | *Feet.* |
| Mar. 4 | 3,575.96 | Jan. 5 | 3,575.29 |
| 20 | 3,575.73 | Feb. 8 | 3,576.11 |
| Apr. 19 | 3,575.79 | July 12 | 3,577.35 |
| 28 | 3,575.90 | 29 | 3,578.03 |
| May 29 | 3,575.60 | Nov. 1 | 3,577.35 |
| June 4 | 3,575.40 | 5 | 3,577.50 |
| | | Dec. 3 | 3,577.60 |
| 1910. | | | |
| July 22 | 3,575.98 | | |
| Sept. 21 | 3,574.96 | | |
| Oct. 28 | 3,574.71 | | |
| Dec. 1 | 3,574.59 | | |

### OWENS RIVER NEAR ROUND VALLEY, CAL.

This station, which is now located 600 feet above the junction of Owens River and Rock Creek, in sec. 10, T. 6 S., R. 31 E., was established August 3, 1903, at a footbridge 100 feet above the present site, to which it was removed May 27, 1907, as the original station had been destroyed on March 19 of that year.

No important streams enter above and Rock Creek is the first tributary below the station. No ditches take water above the gage, but several divert from the main river and its tributaries below the station, the first one being the Owens River canal, which heads 3 miles below the mouth of Rock Creek. The drainage area above the station is approximately 450 square miles.

The gage, which is a vertical staff on the left bank, was not referred to the datum of the original gage.

Discharge measurements are made from a car and cable at the gage.

The channel is composed of rock and lava bowlders and changes little.

*Discharge measurements of Owens River near Round Valley, Cal., in 1903-1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* |
| 1903. | | | |
| Aug. 3 | R. S. Hawley | 1.80 | 161 |
| 9 | .....do | 1.85 | 160 |
| 18 | .....do | 1.75 | 159 |
| 22 | .....do | 1.75 | 160 |
| Sept. 1 | .....do | 1.74 | 159 |
| 12 | .....do | 1.80 | 175 |
| Oct. 8 | .....do | 1.85 | 185 |
| 25 | .....do | 1.82 | 173 |
| Nov. 24 | .....do | 1.88 | 196 |
| Dec. 29 | .....do | 1.70 | 151 |
| 1904. | | | |
| Jan. 25 | R. S. Hawley | 1.80 | 184 |
| Mar. 2 | .....do | 2.20 | 270 |
| 28 | .....do | 2.85 | 458 |
| Apr. 8 | Murphy, Bennett, and Hawley | 1.87 | 186 |
| 27 | R. S. Hawley | 1.82 | 190 |
| June 2 | .....do | 2.57 | 383 |
| 15 | .....do | 3.10 | 564 |
| July 13 | Clausen and Barnes | 2.55 | 380 |
| Aug. 3 | L. M. Barnes | 2.40 | 324 |
| Sept. 9 | R. S. Hawley | 2.01 | 232 |
| Oct. 13 | Hawley, Clapp, and Taylor | 2.25 | 269 |
| Nov. 12 | R. J. Taylor | 2.00 | 218 |
| Dec. 6 | .....do | 1.85 | 155 |
| 1905. | | | |
| Jan. 16 | R. J. Taylor | 1.97 | 184 |
| Feb. 9 | .....do | 1.95 | 175 |
| Apr. 4 | J. S. Evans | 2.00 | 179 |
| May 22 | .....do | 2.39 | 306 |
| June 27 | .....do | 2.58 | 382 |
| July 25 | .....do | 2.15 | 207 |
| Aug. 15 | .....do | 1.90 | 154 |
| Sept. 8 | .....do | 2.00 | 177 |
| 27 | .....do | 1.90 | 155 |
| Nov. 2 | F. R. S. Buttemer | 1.80 | 164 |
| 24 | .....do | 1.85 | 180 |
| Dec. 10 | .....do | 1.73 | 151 |
| 1906. | | | |
| Jan. 8 | F. R. S. Buttemer | 1.75 | 161 |
| 14 | .....do | 1.92 | 196 |
| 14 | .....do | 1.93 | 191 |
| Aug. 23 | Hawley and Shuey | 2.85 | 465 |
| Nov. 3 | G. R. Shuey | 2.14 | 261 |
| 30 | .....do | 2.00 | 214 |
| 1907. | | | |
| Jan. 25 | G. R. Shuey | 2.15 | 261 |
| Feb. 12 | .....do | 2.17 | 254 |
| Mar. 12 | .....do | 2.06 | 232 |
| May 14 | .....do | ........ | 350 |
| Aug. 4[a] | Shuey and Post | 3.25 | 709 |
| 8 | R. B. Post | 3.00 | 566 |
| 24 | .....do | 2.61 | 369 |
| Sept. 7 | .....do | 2.52 | 300 |
| 23 | .....do | 2.40 | 260 |
| Oct. 5 | .....do | 2.35 | 251 |
| 28 | .....do | 2.50 | 278 |
| Nov. 17 | .....do | 2.28 | 233 |
| Dec. 8 | .....do | 2.26 | 243 |

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* |
| 1908. | | | |
| Feb. 22 | R. B. Post | 2.20 | 228 |
| Mar. 29 | .....do | 2.15 | 236 |
| May 12 | .....do | 2.2 | 222 |
| June 18 | .....do | 2.35 | 256 |
| July 15 | W. A. Lamb | 2.38 | 267 |
| Aug. 4 | .....do | 2.45 | 311 |
| 25 | .....do | 2.15 | 240 |
| Sept. 17 | .....do | 2.1 | 220 |
| Oct. 8 | .....do | 1.95 | 198 |
| 23 | Barrows and Lamb | 2.00 | 200 |
| Nov. 7 | .....do | 2.00 | 187 |
| 1909. | | | |
| Jan. 22 | Haines and Lee | 2.34 | 284 |
| Feb. 11 | R. E. Haines | 2.14 | 211 |
| 27 | .....do | 2.02 | 187 |
| Mar. 18 | .....do | 2.10 | 218 |
| Apr. 8 | .....do | 2.48 | 282 |
| 29 | .....do | 2.20 | 224 |
| May 19 | .....do | 2.38 | 294 |
| June 10 | .....do | 3.15 | 574 |
| 30 | .....do | 3.48 | 710 |
| July 23 | .....do | 2.75 | 420 |
| Aug. 11 | .....do | 2.40 | 295 |
| Sept. 1 | .....do | 2.30 | 256 |
| 22 | .....do | 2.11 | 209 |
| Oct. 13 | .....do | 2.09 | 201 |
| Nov. 3 | .....do | 2.00 | 193 |
| 24 | .....do | 2.16 | 216 |
| 1910. | | | |
| Mar. 9 | R. E. Haines | 2.56 | 352 |
| 30 | .....do | 2.12 | 218 |
| Apr. 21 | .....do | 2.20 | 242 |
| May 11 | .....do | 2.40 | 300 |
| June 24 | C. H. Lee | 2.53 | 348 |
| July 11 | .....do | 2.43 | 312 |
| Aug. 2 | .....do | 2.32 | 288 |
| 24 | F. G. Wood | 2.07 | 201 |
| Sept. 17 | G. T. Peekema | 2.02 | 175 |
| Oct. 22 | .....do | 2.02 | 183 |
| Nov. 18 | .....do | 2.03 | 189 |
| Dec. 21 | .....do | 1.98 | 164 |
| 1911. | | | |
| Jan. 25 | G. T. Peekema | 2.15 | 206 |
| Mar. 12 | C. H. Lee | 2.20 | 220 |
| May 5 | .....do | 2.45 | 288 |
| June 26 | .....do | 3.40 | 757 |
| July 7 | .....do | 3.82 | 919 |
| Aug. 3 | J. E. Jones | 2.92 | 466 |
| 24 | .....do | 2.50 | 342 |
| Sept. 20 | .....do | 2.30 | 232 |
| Oct. 24 | .....do | 2.25 | 250 |
| Nov. 22 | .....do | 2.18 | 223 |
| Dec. 13 | .....do | 2.10 | 201 |
| 1912. | | | |
| Jan. 17 | J. E. Jones | 2.15 | 218 |
| Feb. 21 | .....do | 2.10 | 199 |
| Mar. 20 | .....do | 2.12 | 212 |
| Apr. 16 | .....do | 2.20 | 227 |
| May 9 | .....do | 2.08 | 192 |
| 22 | .....do | 2.12 | 225 |
| June 12 | .....do | 2.46 | 307 |

[a] Beginning Aug. 4, 1907, the gage heights refer to the new gage established May 29, 1907.

| Day | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904-5 | | | | | | | | | | | | |
| 1. | [illegible] | [illegible] | [illegible] | [illegible] | 2.2 | 2.2 | 1.9 | 2.1 | 2.3 | 2.5 | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | 2.15 | 2.35 | 1.85 | [illegible] | 2.3 | [illegible] | 2.05 | [illegible] |
| 3 | [illegible] | [illegible] | 2.1 | [illegible] | [illegible] | [illegible] | 2.0 | 2.1 | 2.3 | [illegible] | 2.05 | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | 2.0 | 2.1 | [illegible] | 2.0 | [illegible] | 2.3 | [illegible] | 2.0 | [illegible] |
| 5. | [illegible] | [illegible] | 2.1 | 2.0 | 2.1 | [illegible] | 2.0 | 2.1 | 2.3 | [illegible] | 2.0 | [illegible] |
| 6. | [illegible] | 2.2 | 2.1 | 2.0 | 2.0 | 2.25 | 2.0 | 2.05 | 2.3 | 2.6 | 1.95 | 2.0 |
| 7. | [illegible] | 2.1 | 2.0 | 2.0 | 2.1 | 2.25 | 2.0 | 2.0 | 2.35 | 2.5 | 1.95 | 2.0 |
| 8. | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | [illegible] | 2.0 | 2.0 | 2.35 | 2.5 | 2.0 | 2.0 |
| 9 | 2.2 | 2.1 | [illegible] | 2.0 | [illegible] | 2.1 | [illegible] | 2.0 | 2.4 | 2.5 | 2.0 | [illegible] |
| 10 | 2.25 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.4 | 2.5 | 2.0 | 2.0 |
| 11 | 2.3 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.4 | 2.5 | 1.9 | 2.0 |
| 12 | 2.3 | 2.1 | 2.0 | [illegible] | 2.0 | 2.0 | 2.0 | 2.0 | 2.55 | 2.45 | 1.9 | 2.0 |
| 13 | 2.25 | 2.1 | 2.0 | [illegible] | 2.0 | 2.5 | 2.0 | 2.0 | 2.7 | 2.4 | 1.9 | 2.0 |
| 14. | 2.25 | 2.1 | 2.0 | 1.9 | 2.0 | 2.15 | 1.95 | 2.0 | 2.75 | 2.4 | 2.0 | 2.0 |
| 15 | 2.2 | 2.1 | 2.05 | 1.9 | 2.0 | 2.15 | 1.9 | 2.0 | 2.75 | 2.4 | 2.0 | 2.0 |
| 16. | 2.2 | 2.1 | 2.05 | 1.9 | 2.0 | 2.15 | 1.9 | 2.0 | 2.75 | 2.3 | 2.0 | 2.0 |
| 17 | 2.1 | 2.1 | 2.05 | 1.95 | 2.0 | 2.1 | 1.95 | 2.2 | 3.0 | 2.2 | 1.9 | 2.0 |
| 18. | 2.0 | 2.1 | 2.05 | 1.95 | 2.1 | 2.1 | 1.95 | 2.35 | 3.0 | 2.2 | 1.9 | 2.0 |
| 19 | 2.15 | 2.1 | 2.0 | 2.0 | 2.2 | 2.05 | 1.95 | 2.35 | 3.0 | 2.2 | 1.9 | 2.0 |
| 20 | 2.15 | 2.1 | 2.0 | 2.0 | 2.1 | 2.05 | 1.95 | 2.4 | 3.0 | 2.2 | 1.85 | 2.0 |

*Daily gage height, in feet, of Owens River near Round Valley,* [illegible]

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 21. | 2.2 | 2.1 | 1.95 | 2.1 | 2.0 | 2.1 | 1.9 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 22. | 2.15 | 2.1 | 1.9 | 2.1 | 1.95 | 2.1 | 1.9 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 23. | 2.15 | 2.1 | 1.85 | 2.0 | 1.85 | 2.1 | 1.9 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 24. | 2.15 | 2.1 | 1.8 | 2.0 | 1.9 | [illegible] | 1.85 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 25. | 2.15 | 2.0 | 1.8 | 2.1 | 1.85 | 2.0 | 1.95 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 26. | 2.15 | 2.0 | 1.8 | 2.1 | 1.85 | 2.0 | 1.95 | 2.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 27. | 2.15 | 2.0 | 1.9 | 2.1 | 2.0 | 2.0 | 1.85 | 2.45 | [illegible] | [illegible] | [illegible] | [illegible] |
| 28. | 2.15 | 2.0 | 1.95 | 2.1 | 2.1 | 1.95 | [illegible] | 2.55 | [illegible] | [illegible] | [illegible] | [illegible] |
| 29. | 2.1 | 2.0 | 1.9 | 2.1 | ...... | 1.9 | [illegible] | 2.5 | 2.55 | [illegible] | 1.9 | [illegible] |
| 30. | 2.1 | 2.0 | 2.0 | 2.2 | ...... | 1.9 | 2.85 | 2.4 | 2.5 | [illegible] | 1.9 | 2.0 |
| 31. | 2.1 | ...... | 2.0 | 2.2 | ...... | 1.9 | ...... | 2.3 | ...... | [illegible] | 1.9 | ...... |
| **1905–6.** | | | | | | | | | | | | |
| 1. | 2.0 | 1.8 | 1.9 | 1.8 | 1.95 | 1.95 | 2.45 | 2.35 | 2.4 | 3.5 | 3.5 | 2.6 |
| 2. | 2.0 | 1.8 | 1.9 | 1.8 | 1.9 | 1.95 | 2.4 | 2.3 | 2.45 | 3.55 | 3.5 | 2.6 |
| 3. | 2.0 | 1.75 | 1.95 | 1.8 | 1.9 | 1.95 | 2.4 | 2.35 | 2.4 | 3.5 | 3.45 | 2.6 |
| 4. | 1.95 | 1.75 | 1.95 | 1.8 | 1.9 | 1.95 | 2.4 | 2.3 | 2.45 | 3.45 | 3.45 | 2.6 |
| 5. | 1.95 | 1.8 | 1.95 | 1.8 | 1.9 | 1.95 | 2.35 | 2.3 | 2.5 | (a) | 3.4 | 2.6 |
| 6. | 1.9 | 1.8 | 2.0 | 1.8 | 1.9 | 1.95 | 2.1 | 2.35 | 2.6 | .... | 3.3 | 2.55 |
| 7. | 1.9 | 1.85 | 2.0 | 1.75 | 1.9 | 2.0 | 2.15 | 2.2 | 2.7 | .... | 3.3 | 2.5 |
| 8. | 1.9 | 1.85 | 2.0 | 1.75 | 1.9 | 2.0 | 2.3 | 2.35 | 2.9 | .... | 3.3 | 2.5 |
| 9. | 1.9 | 1.9 | 1.95 | 1.75 | 1.95 | 2.0 | 2.5 | 2.2 | 3.0 | .... | 3.25 | 2.45 |
| 10. | 1.95 | 1.9 | 1.9 | 1.75 | 1.95 | 2.0 | 2.6 | 2.25 | 3.05 | .... | 3.25 | 2.45 |
| 11. | 1.95 | 1.9 | 1.9 | 1.8 | 1.95 | 2.1 | 2.7 | 2.35 | 3.0 | .... | 3.2 | 2.45 |
| 12. | 2.0 | 1.9 | 1.9 | 1.8 | 1.95 | 2.3 | 2.7 | 2.5 | 3.25 | .... | 3.1 | 2.45 |
| 13. | 2.0 | 1.9 | 1.9 | 1.9 | 1.95 | 2.25 | 2.75 | 2.45 | 3.3 | .... | 3.1 | 2.45 |
| 14. | 2.0 | 1.95 | 1.85 | 1.9 | 1.95 | 2.2 | 2.7 | 2.4 | 3.4 | .... | 3.1 | 2.4 |
| 15. | 2.0 | 2.0 | 1.85 | 1.9 | 1.95 | 2.2 | 2.65 | 2.4 | 3.4 | .... | 3.05 | 2.4 |
| 16. | 2.0 | 2.0 | 1.85 | 1.9 | 1.95 | 2.25 | 2.7 | 2.4 | 3.45 | .... | 3.0 | 2.4 |
| 17. | 1.95 | 2.0 | 1.8 | 1.95 | 1.95 | 2.25 | 2.7 | 2.4 | 3.45 | .... | 2.95 | 2.4 |
| 18. | 1.95 | 2.0 | 1.8 | 2.15 | 1.95 | 2.25 | 2.7 | 2.45 | 3.5 | .... | 2.95 | 2.4 |
| 19. | 1.9 | 2.0 | 1.8 | 2.1 | 1.95 | 2.3 | 2.7 | 2.6 | 3.55 | .... | 3.1 | 2.35 |
| 20. | 1.85 | 2.0 | 1.75 | 2.0 | 1.95 | 2.3 | 2.7 | 2.65 | 3.6 | .... | 3.2 | 2.35 |
| 21. | 1.85 | 2.0 | 1.75 | 2.0 | 2.0 | 2.35 | 2.6 | 2.6 | 3.7 | .... | 3.2 | 2.3 |
| 22. | 1.85 | 2.0 | 1.75 | 2.1 | 2.0 | 2.35 | 2.6 | 2.55 | 3.75 | .... | 3.1 | 2.3 |
| 23. | 1.85 | 2.0 | 1.75 | 2.1 | 2.0 | 2.35 | 2.5 | 2.5 | 3.85 | .... | 2.85 | 2.25 |
| 24. | 1.85 | 2.0 | 1.75 | 2.1 | 2.0 | 2.4 | 2.35 | 2.5 | 3.9 | .... | 2.85 | 2.25 |
| 25. | 1.8 | 2.0 | 1.75 | 2.1 | 2.0 | 2.35 | 2.25 | 2.5 | 3.9 | .... | 2.85 | 2.25 |
| 26. | 1.8 | 2.0 | 1.8 | 2.05 | 2.0 | 2.4 | 2.2 | 2.5 | 3.9 | .... | 2.7 | 2.3 |
| 27. | 1.75 | 2.0 | 1.8 | 2.0 | 1.95 | 2.35 | 2.15 | 2.5 | 3.7 | .... | 2.6 | 2.3 |
| 28. | 1.75 | 1.95 | 1.8 | 2.0 | 1.95 | 2.3 | 2.15 | 2.45 | 3.65 | .... | 2.6 | 2.3 |
| 29. | 1.75 | 1.9 | 1.8 | 1.95 | ...... | 2.3 | 2.2 | 2.4 | 3.5 | 3.65 | 2.6 | 2.3 |
| 30. | 1.75 | 1.9 | 1.8 | 1.9 | ...... | 2.35 | 2.2 | 2.45 | 3.6 | 3.6 | 2.6 | 2.3 |
| 31. | 1.75 | ...... | 1.8 | 1.9 | ...... | 2.5 | ...... | 2.4 | ...... | 3.6 | 2.6 | ...... |
| **1906–7.** | | | | | | | | | | | | |
| 1. | 2.3 | 2.15 | 2.0 | 2.15 | 2.2 | 2.25 | ...... | ...... | 3.0 | 3.6 | 3.45 | 2.5 |
| 2. | 2.3 | 2.15 | 2.0 | 2.1 | 2.2 | 2.3 | ...... | ...... | 3.2 | 3.6 | 3.45 | 2.5 |
| 3. | 2.3 | 2.15 | 2.05 | 2.0 | 2.25 | 2.3 | ...... | ...... | 3.4 | 3.6 | 3.45 | 2.5 |
| 4. | 2.35 | 2.15 | 2.1 | 1.95 | 2.3 | 2.35 | ...... | ...... | 3.4 | 3.6 | 3.4 | 2.5 |
| 5. | 2.35 | 2.15 | 2.1 | 1.85 | 2.3 | 2.4 | ...... | ...... | 3.35 | 3.6 | 3.3 | 2.5 |
| 6. | 2.35 | 2.15 | 2.1 | 1.9 | 2.35 | 2.4 | ...... | ...... | 3.2 | 3.6 | 3.2 | 2.5 |
| 7. | 2.3 | 2.15 | 2.1 | 1.9 | 2.35 | 2.35 | ...... | ...... | 3.1 | 3.6 | 3.2 | 2.5 |
| 8. | 2.3 | 2.1 | 2.1 | 1.95 | 2.3 | 2.3 | ...... | ...... | 3.1 | 3.6 | 3.1 | 2.5 |
| 9. | 2.3 | 2.1 | 2.15 | 2.0 | 2.2 | 2.25 | ...... | ...... | 3.05 | 3.6 | 3.0 | 2.5 |
| 10. | 2.3 | 2.1 | 2.15 | 2.1 | 2.2 | 2.25 | ...... | ...... | 3.0 | 3.6 | 2.9 | 2.5 |
| 11. | 2.25 | 2.1 | 2.2 | 2.15 | 2.2 | 2.2 | ...... | ...... | 3.0 | 3.6 | 2.9 | 2.5 |
| 12. | 2.2 | 2.1 | 2.2 | 2.15 | 2.2 | 2.05 | ...... | ...... | 3.0 | 3.6 | 2.9 | 2.55 |
| 13. | 2.2 | 2.1 | 2.2 | 2.15 | 2.2 | 2.25 | ...... | ...... | 2.9 | 3.6 | 2.85 | 2.55 |
| 14. | 2.2 | 2.1 | 2.2 | 2.15 | 2.2 | 2.3 | ...... | ...... | 2.8 | 3.55 | 2.85 | 2.55 |
| 15. | 2.2 | 2.05 | 2.2 | 2.15 | 2.2 | 2.3 | ...... | ...... | 2.8 | 3.5 | 2.85 | 2.5 |
| 16. | 2.2 | 2.05 | 2.2 | 2.15 | 2.3 | 2.25 | ...... | ...... | 2.8 | 3.45 | 2.85 | 2.5 |
| 17. | 2.2 | 2.0 | 2.2 | 2.15 | 2.25 | 2.5 | ...... | ...... | 3.0 | 3.4 | 2.8 | 2.55 |
| 18. | 2.2 | 2.0 | 2.2 | 2.15 | 2.2 | 4.2 | ...... | ...... | 3.1 | 3.4 | 2.8 | 2.55 |
| 19. | 2.2 | 2.0 | 2.15 | 2.15 | 2.2 | 3.0 | ...... | ...... | 2.8 | 3.4 | 2.75 | 2.6 |
| 20. | 2.15 | 2.0 | 2.15 | 2.15 | 2.25 | 2.5 | ...... | ...... | 2.7 | 3.4 | 2.75 | 2.6 |
| 21. | 2.15 | 2.0 | 2.1 | 2.2 | 2.25 | 2.7 | ...... | ...... | 3.0 | 3.4 | 2.7 | 2.55 |
| 22. | 2.15 | 2.0 | 2.1 | 2.2 | 2.3 | 2.5 | ...... | ...... | 3.0 | 3.35 | 2.7 | 2.5 |
| 23. | 2.1 | 2.0 | 2.15 | 2.2 | 2.35 | 2.5 | ...... | ...... | 3.1 | 3.3 | 2.65 | 2.4 |
| 24. | 2.1 | 2.0 | 2.15 | 2.15 | 2.25 | 2.4 | ...... | ...... | 3.0 | 3.25 | 2.6 | 2.4 |
| 25. | 2.1 | 2.05 | 2.15 | 2.15 | 2.2 | 2.4 | ...... | ...... | 3.0 | 3.3 | 2.6 | 2.4 |

a Station discontinued; operations resumed July 29.

[illegible]

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | | | |
| 2.0 | | | | | 2.1 | 2.7 | ...... | 3.2 | 3.1 | 2.35 | 2.0 |
| | [illegible] | [illegible] | 1.95 | 2.3 | ...... | ...... | 2.5 | ...... | ...... | ...... | |
| 2.0 | | | | | 2.0 | 2.9 | ...... | 3.2 | 3.0 | 2.4 | [illegible] |
| | 2.0 | [illegible] | 2.6 | 2.25 | | ...... | 2.5 | ...... | ...... | 2.4 | |
| 2.0 | ... | | ...... | ... | 2.1 | 2.9 | ...... | 3.2 | 3.0 | ...... | 2.0 |
| | 1.95 | 1.95 | 2.3 | 2.1 | ...... | ...... | 2.5 | ...... | 3.0 | 2.4 | |
| 2.0 | | | | | 2.0 | 2.9 | ...... | 3.2 | ...... | 2.5 | 2.1 |
| | [illegible] | 1.9 | 2.3 | 2.0 | 2.1 | ...... | 2.5 | 3.25 | 2.9 | ...... | 2.1 |
| 2.0 | | | | | 1.9 | 2.8 | 2.4 | ...... | 2.9 | 2.5 | [illegible] |
| | 1.95 | 1.9 | 2.3 | 1.9 | ...... | 2.7 | 2.55 | 3.3 | ...... | 2.55 | 2.1 |
| 2.0 | | | | | 1.8 | ...... | ...... | 3.4 | 2.8 | 2.6 | 2.2 |
| | 1.95 | 1.95 | 2.35 | 1.9 | ...... | 2.6 | 2.5 | ...... | 2.85 | ...... | 2.1 |
| 2.0 | | | | ...... | 1.7 | ...... | ...... | 3.4 | 2.8 | 2.5 | ... |
| | 1.95 | 1.95 | 2.4 | 1.8 | ...... | 2.5 | 2.5 | 3.4 | ...... | 2.45 | 2.15 |
| 1.95 | | ... | ... | ...... | 2.0 | ...... | ...... | ...... | 2.7 | ...... | ...... |
| | 1.95 | 1.95 | 2.35 | 1.95 | ...... | 2.35 | 2.45 | 3.5 | ...... | 2.4 | 2.1 |
| 2.0 | | ... | ... | ... | 2.0 | ...... | 2.5 | 3.6 | 2.7 | 2.35 | ... |
| | 1.95 | 1.95 | 2.4 | 2.0 | ...... | 2.3 | | | | 2.3 | 2.2 |
| 1.95 | | ... | .... | .... | 2.0 | 2.3 | 2.7 | 3.5 | 2.6 | ...... | |
| | 1.95 | 1.95 | 2.4 | ... | ...... | ...... | ...... | 3.5 | ...... | 2.3 | 2.1 |
| 2.0 | .. | 1.95 | .... | ...... | 2.0 | ...... | 2.7 | ...... | 2.6 | 2.25 | ...... |

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1903-1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909-10.** | | | | | | | | | | | | |
| 1 | | | 2.3 | 2.6 | | 2.15 | 2.1 | 2.4 | 3.2 | 2.5 | | 2.0 |
| 2 | 2.1 | 2.1 | | | 2.1 | | | | | | 2.35 | |
| 3 | 2.0 | 2.0 | 2.2 | 2.5 | | 2.2 | 2.15 | 2.35 | 3.3 | 2.4 | | 2.15 |
| 4 | 2.0 | 2.0 | 2.25 | | 2.0 | 2.2 | | | 3.4 | | 2.3 | 2.1 |
| 5 | | | | 2.4 | 2.1 | | 2.1 | 2.4 | 3.2 | 2.45 | 2.3 | |
| 6 | 1.9 | 2.1 | 2.2 | | | 2.2 | 2.15 | | 3.25 | 2.4 | | 2.1 |
| 7 | 2.0 | | | 2.3 | 2.0 | 2.2 | | 2.4 | | | 2.2 | |
| 8 | | 2.0 | | | | 2.25 | 2.1 | 2.45 | 3.2 | 2.45 | | 2.0 |
| 9 | 1.9 | 2.25 | | 2.1 | 2.1 | | | | | | 2.1 | |
| 10 | 1.9 | | | | | 2.2 | 2.15 | 2.5 | 3.3 | 2.4 | | 2.05 |
| 11 | | 2.2 | | 2.0 | 2.0 | 2.25 | 2.2 | 2.55 | | | 2.1 | 2.0 |
| 12 | 1.95 | 2.2 | | | | | | | 3.15 | 2.4 | 2.0 | |
| 13 | 2.0 | | 2.3 | 2.0 | 2.1 | 2.2 | 2.15 | 2.5 | | | | 2.0 |
| 14 | | 2.1 | | | | | | | 3.2 | 2.4 | 2.2 | |
| 15 | 1.95 | | 2.4 | 2.0 | 2.1 | 2.2 | 2.2 | 2.6 | | | | 2.0 |
| 16 | | 2.2 | | | | | 2.1 | 2.6 | 3.1 | 2.45 | 2.15 | |
| 17 | 2.1 | | 2.3 | 2.0 | 2.1 | 2.2 | 2.2 | 2.6 | 3.15 | 2.4 | | 2.05 |
| 18 | | 2.15 | | | 2.1 | | | 2.6 | 3.0 | | 2.1 | |
| 19 | 2.0 | | 2.3 | 2.0 | | 2.2 | 2.15 | | 3.0 | 2.45 | | 2.0 |
| 20 | | 2.25 | | | 2.1 | | 2.2 | 2.7 | | | 2.0 | |
| 21 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | | | 2.9 | 2.4 | | 2.05 |
| 22 | | | | | | | 2.15 | 2.7 | 2.9 | | 2.1 | |
| 23 | 2.0 | 2.2 | 2.3 | 2.1 | 2.1 | 2.15 | | | 2.7 | 2.45 | | 2.0 |
| 24 | 2.1 | 2.15 | 2.3 | | | | 2.3 | 2.8 | 2.6 | | 2.0 | |
| 25 | | 2.2 | | 2.1 | 2.15 | 2.1 | 2.3 | | | 2.4 | | 2.05 |
| 26 | 2.0 | | 2.3 | | | | 2.4 | 2.8 | 2.55 | | 2.1 | |
| 27 | | 2.3 | | 2.1 | 2.1 | 2.1 | 2.35 | 2.85 | 2.5 | 2.5 | | 2.0 |
| 28 | 2.1 | | 2.3 | | 2.1 | | 2.4 | | | 2.6 | 2.0 | |
| 29 | | 2.15 | 2.3 | 2.1 | | 2.1 | | 2.8 | 2.5 | | | 1.9 |
| 30 | 2.0 | | | | | | 2.35 | | | 2.5 | 2.1 | 1.85 |
| 31 | 2.1 | | 2.3 | 2.0 | | 2.1 | | 3.0 | | 2.35 | | |
| **1910-11.** | | | | | | | | | | | | |
| 1 | 1.95 | 2.0 | 1.9 | 1.95 | 2.6 | 2.15 | 2.6 | 2.53 | 2.75 | | 3.4 | 2.5 |
| 2 | | | | | | | | | | 3.45 | | |
| 3 | 1.95 | 2.1 | 1.9 | 1.95 | 2.4 | 2.1 | 2.65 | 2.4 | 2.85 | 3.45 | 3.45 | 2.4 |
| 4 | | | 2.0 | | | | | | | | 2.92 | 2.4 |
| 5 | 2.0 | 2.0 | | 2.0 | 2.4 | 2.15 | 2.7 | 2.45 | 2.9 | 3.75 | 3.35 | |
| 6 | | 2.05 | 1.9 | | | | | | | 3.8 | | 2.35 |
| 7 | 2.0 | | | 1.95 | 2.35 | 2.2 | 2.6 | 2.4 | 2.85 | 3.8 | 3.4 | |
| 8 | | 2.0 | 1.95 | | | | | 2.4 | 2.9 | 3.83 | | 2.35 |
| 9 | 2.1 | | | | 2.25 | 2.6 | 2.5 | | | | 3.2 | |
| 10 | | 2.05 | 1.85 | 2.1 | | 2.2 | | 2.4 | 2.9 | 3.75 | | 2.3 |
| 11 | 2.05 | | 1.85 | | 2.2 | | 2.3 | 2.4 | 2.95 | | 3.23 | |
| 12 | | 2.0 | | 2.0 | | 2.2 | | | | 3.8 | | 2.35 |
| 13 | 2.1 | | 1.9 | | 2.2 | | 2.25 | 2.45 | 2.95 | 3.73 | 2.9 | |
| 14 | 2.1 | 2.05 | | 2.1 | | 2.23 | | 2.4 | 3.0 | | | 2.35 |
| 15 | | | 1.95 | 2.0 | 2.25 | | 2.3 | | | 4.0 | 3.0 | |
| 16 | 2.15 | 1.95 | | | | 2.15 | | 2.45 | 3.2 | 3.93 | | 2.35 |
| 17 | | 1.9 | 1.95 | 2.1 | 2.15 | 2.2 | 2.35 | 2.45 | 3.4 | | 2.85 | |
| 18 | 2.05 | | 2.0 | | | 2.15 | | | 3.7 | 3.95 | 2.9 | 2.35 |
| 19 | | 1.85 | | 2.05 | 2.2 | | 2.4 | 2.55 | 3.77 | | | |
| 20 | 2.1 | | 2.0 | | | 2.25 | | | | 3.65 | 2.75 | 2.3 |
| 21 | 2.0 | 1.9 | | 2.1 | 2.1 | | 2.45 | 2.5 | 3.95 | | | |
| 22 | | | 2.0 | 2.0 | | 2.3 | | 2.6 | | 3.7 | 2.8 | 2.3 |
| 23 | 2.0 | 1.8 | | | 2.1 | 2.4 | 2.5 | | 3.8 | | | |
| 24 | | | 1.95 | 2.1 | | 2.4 | | 2.7 | 3.8 | 3.55 | 2.7 | 2.3 |
| 25 | 2.05 | 1.85 | | 2.15 | 2.1 | | 2.55 | | | | | |
| 26 | 2.1 | | 2.0 | 2.0 | 2.15 | 2.5 | | 2.7 | 3.6 | 3.5 | 2.6 | 2.3 |
| 27 | 2.1 | | | 2.1 | | | 2.53 | | | | | |
| 28 | | 1.8 | 1.95 | | 2.1 | 2.5 | | 2.75 | 3.55 | 3.5 | 2.5 | 2.33 |
| 29 | 2.1 | 1.85 | 1.95 | | | | 2.55 | | | | 2.55 | |
| 30 | 2.0 | | | 2.6 | | 2.6 | 2.5 | 2.7 | 3.4 | 3.53 | | 2.3 |
| 31 | 2.1 | | 2.0 | | | 2.55 | | | | | 2.45 | |

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1903-1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 2.3 | | | 2.0 | 2.0 | 2.1 | | 2.0 | 2.9 |
| 2 | | 2.25 | 2.18 | | | | 2.2 | | |
| 3 | 2.3 | | | 1.95 | 2.0 | | | 2.1 | 2.85 |
| 4 | | | 2.1 | | | 2.15 | 2.25 | | |
| 5 | 2.33 | 2.3 | | 1.95 | 1.98 | | | 1.8 | 2.75 |
| 6 | 2.3 | | 2.15 | | | 2.15 | 2.2 | | |
| 7 | 2.25 | 2.25 | | 1.97 | 2.0 | | | 1.75 | 2.7 |
| 8 | 2.3 | | 2.1 | | | 2.2 | 2.15 | | |
| 9 | | 2.25 | | 1.93 | 1.95 | | | 2.1 | 2.55 |
| 10 | 2.23 | | 2.13 | | | 2.2 | 2.1 | | |
| 11 | | 2.25 | | 2.0 | 2.0 | | | 1.95 | 2.5 |
| 12 | 2.3 | | 2.1 | | | 2.15 | 2.05 | | 2.45 |
| 13 | | 2.3 | 2.1 | 1.98 | 2.0 | | | 1.9 | 2.45 |
| 14 | 2.3 | | 2.13 | | | 2.1 | 2.0 | | 2.45 |
| 15 | 2.3 | 2.15 | | 2.05 | 2.0 | | | 2.0 | |
| 16 | 2.3 | | 2.1 | | | 2.15 | 2.2 | | 2.4 |
| 17 | 2.3 | 2.19 | 2.1 | 2.0 | 2.1 | | | 2.0 | 2.45 |
| 18 | | | | 1.98 | | 2.1 | 2.1 | 2.05 | |
| 19 | 2.3 | 2.2 | 2.13 | 1.98 | 2.1 | 2.15 | | | 2.4 |
| 20 | | | | | | | 2.2 | 2.0 | 2.35 |
| 21 | 2.3 | 2.15 | 2.1 | 2.0 | 2.1 | 2.15 | | | 2.3 |
| 22 | | 2.18 | | | | | 2.15 | 2.1 | |
| 23 | 2.25 | | 2.1 | 2.0 | 2.1 | 2.1 | | 2.2 | 2.4 |
| 24 | | 2.1 | 2.13 | | | | 2.1 | | 2.35 |
| 25 | 2.3 | | | 2.0 | 2.15 | 2.15 | | 2.35 | |
| 26 | | 2.15 | | | | | 2.0 | | 2.4 |
| 27 | 2.2 | | 2.1 | 1.93 | 2.1 | 2.2 | | 2.45 | 2.3 |
| 28 | | 2.2 | 2.13 | | | | 2.05 | | 2.3 |
| 29 | 2.25 | | | 2.0 | 2.1 | 2.2 | | 2.75 | |
| 30 | | 2.15 | 2.1 | 1.98 | | | 1.9 | | |
| 31 | 2.2 | | | | | 2.2 | | 2.8 | |

NOTE.—Gage destroyed Mar. 19, 1907. Gage heights Mar. 20-31, 1907, estimated by comparison with Rock and Pine creeks. New gage installed May 29, 1907, about 100 feet below original location.

## *Rating tables for Owens River near Round Valley, Cal.*

**August 4, 1903, to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.60 | 132 | 2.20 | 272 | 2.70 | 412 | 3.20 | 568 |
| 1.70 | 152 | 2.30 | 298 | 2.80 | 442 | 3.30 | 601 |
| 1.80 | 172 | 2.40 | 325 | 2.90 | 473 | 3.40 | 636 |
| 1.90 | 196 | 2.50 | 353 | 3.00 | 504 | 3.50 | 675 |
| 2.00 | 221 | 2.60 | 382 | 3.10 | 536 | 3.60 | 715 |
| 2.10 | 246 | | | | | | |

**January 1 to October 10, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.80 | 134 | 2.20 | 240 | 2.60 | 377 | 3.00 | 533 |
| 1.90 | 158 | 2.30 | 271 | 2.70 | 415 | | |
| 2.00 | 184 | 2.40 | 304 | 2.80 | 453 | | |
| 2.10 | 211 | 2.50 | 339 | 2.90 | 493 | | |

NOTE.—Table based on 12 discharge measurements made during 1904-5. It is fairly well defined between gage heights 1.9 feet and 3.1 feet.

**October 11 to December 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.70 | 141 | 1.80 | 165 | 1.90 | 191 | 2.00 | 219 |

NOTE.—Table is based on three discharge measurements made during the latter part of 1905 and is well defined.

*Rating tables for Owens River near Round Valley, Cal.*—Continued.

**January 1, [illegible], to March 31, [illegible].**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.60 | 132 | 2.30 | 297 | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.70 | 152 | 2.40 | 326 | [illegible] | 545 | [illegible] | [illegible] |
| 1.80 | 173 | 2.50 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1.90 | 194 | 2.60 | 385 | [illegible] | [illegible] | [illegible] | [illegible] |
| 2.00 | 215 | 2.70 | 416 | [illegible] | [illegible] | [illegible] | [illegible] |
| 2.10 | 244 | 2.80 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2.20 | 270 | 2.90 | [illegible] | [illegible] | 715 | | |

Note.—Table applicable only to open channel. It is based on discharge measurements made during 1903 to 1907, and is well defined between gage heights [illegible] feet and [illegible] feet.

**May [illegible], [illegible], to December 31, [illegible].**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1.90 | 174 | 2.50 | 307 | [illegible] | [illegible] | [illegible] | [illegible] |
| 2.00 | 191 | 2.60 | 342 | [illegible] | [illegible] | [illegible] | [illegible] |
| 2.10 | 210 | 2.70 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2.20 | 231 | 2.80 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2.30 | 253 | 2.90 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2.40 | 279 | 3.00 | [illegible] | | | | |

Note.—Table applicable only to open channel. It is based on [illegible] discharge measurements made from August, 1907, to Dec. 31, 1908. It is fairly well defined between gage heights [illegible] feet and [illegible] feet.

*Daily discharge, in second-feet, of Owens River near Round Valley, Cal., for [illegible].*

| Day. | Jan. | Feb. | Mar. | Apr. | May | June. | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 170 | 149 | 149 | [illegible] | 253 | 408 | [illegible] | [illegible] | 253 |
| 2 | 170 | 149 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 320 | 239 |
| 3 | 177 | 149 | [illegible] | [illegible] | 309 | [illegible] | [illegible] | 320 | 226 |
| 4 | 177 | 158 | 170 | 408 | [illegible] | [illegible] | [illegible] | 320 | 226 |
| 5 | 203 | 170 | 170 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 226 |
| 6 | 226 | 170 | 170 | [illegible] | 385 | [illegible] | 478 | [illegible] | 226 |
| 7 | 203 | 177 | [illegible] | 320 | [illegible] | [illegible] | [illegible] | [illegible] | 214 |
| 8 | 177 | 185 | 185 | 320 | 320 | [illegible] | [illegible] | [illegible] | 203 |
| 9 | 170 | 185 | 185 | 320 | 320 | [illegible] | [illegible] | [illegible] | 203 |
| 10 | 170 | 203 | 194 | [illegible] | 320 | [illegible] | [illegible] | [illegible] | 214 |
| 11 | 170 | 214 | 203 | [illegible] | 320 | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | 177 | 253 | 194 | [illegible] | 320 | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 253 | 252 | [illegible] | 478 | 320 | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 358 | 239 | 194 | 478 | 320 | [illegible] | [illegible] | [illegible] | 194 |
| 15 | 302 | 226 | [illegible] | 478 | 320 | [illegible] | [illegible] | [illegible] | 185 |
| 16 | 253 | 203 | 194 | 478 | 320 | [illegible] | [illegible] | [illegible] | 194 |
| 17 | 253 | 214 | 185 | 478 | [illegible] | [illegible] | [illegible] | [illegible] | 203 |
| 18 | 253 | 185 | 203 | [illegible] | [illegible] | [illegible] | 478 | [illegible] | 203 |
| 19 | 253 | 177 | 170 | 536 | [illegible] | [illegible] | 478 | [illegible] | 214 |
| 20 | 253 | 170 | 164 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 203 |
| 21 | 253 | 170 | 158 | [illegible] | 320 | 478 | [illegible] | [illegible] | 226 |
| 22 | 269 | 170 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 203 |
| 23 | 269 | 164 | 149 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 203 |
| 24 | 285 | 158 | 164 | 320 | [illegible] | [illegible] | [illegible] | 302 | 214 |
| 25 | 269 | 170 | 185 | 285 | 320 | [illegible] | [illegible] | 285 | 203 |
| 26 | 269 | 177 | 185 | 269 | 302 | 716 | [illegible] | 285 | 203 |
| 27 | 269 | 185 | 185 | [illegible] | [illegible] | [illegible] | [illegible] | 269 | 214 |
| 28 | 285 | 185 | 185 | [illegible] | [illegible] | [illegible] | 177 | 253 | 226 |
| 29 | 285 | ........ | 185 | 253 | [illegible] | 716 | 358 | 253 | 214 |
| 30 | 285 | ........ | 185 | 253 | [illegible] | 716 | 358 | 253 | 203 |
| 31 | 194 | ........ | 185 | ........ | [illegible] | ........ | 358 | 239 | ........ |

*Daily discharge, in second-feet, of Owens River near Round Valley, Cal., for 1909-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909-10.** | | | | | | | | | | | | |
| 1 | 203 | 203 | 253 | 370 | 192 | 221 | 206 | 301 | 596 | 335 | 284 | 177 |
| 2 | 203 | 203 | 239 | 352 | 206 | 228 | 214 | 292 | 616 | 318 | 284 | 199 |
| 3 | 185 | 185 | 226 | 335 | 192 | 236 | 221 | 284 | 636 | 301 | 276 | 221 |
| 4 | 185 | 185 | 239 | 318 | 177 | 236 | 214 | 292 | 676 | 310 | 268 | 206 |
| 5 | 177 | 194 | 226 | 301 | 206 | 236 | 206 | 301 | 596 | 318 | 268 | 206 |
| 6 | 170 | 203 | 226 | 284 | 192 | 236 | 221 | 301 | 616 | 301 | 252 | 206 |
| 7 | 185 | 194 | 226 | 268 | 177 | 236 | 214 | 301 | 606 | 310 | 236 | 192 |
| 8 | 177 | 185 | 226 | 247 | 192 | 252 | 206 | 318 | 596 | 318 | 221 | 177 |
| 9 | 170 | 239 | 226 | 206 | 206 | 244 | 214 | 326 | 616 | 310 | 206 | 184 |
| 10 | 170 | 226 | 253 | 192 | 192 | 236 | 221 | 335 | 636 | 301 | 206 | 192 |
| 11 | 170 | 226 | 253 | 177 | 177 | 252 | 236 | 352 | 606 | 301 | 206 | 177 |
| 12 | 177 | 226 | 253 | 177 | 192 | 244 | 228 | 344 | 576 | 301 | 177 | 177 |
| 13 | 185 | 214 | 253 | 177 | 206 | 236 | 221 | 335 | 586 | 301 | 206 | 177 |
| 14 | 185 | 203 | 269 | 177 | 206 | 236 | 228 | 352 | 596 | 301 | 236 | 177 |
| 15 | 177 | 214 | 285 | 177 | 206 | 236 | 236 | 370 | 576 | 310 | 228 | 177 |
| 16 | 185 | 226 | 269 | 177 | 206 | 236 | 206 | 370 | 556 | 318 | 221 | 184 |
| 17 | 203 | 226 | 253 | 177 | 206 | 236 | 236 | 370 | 576 | 301 | 214 | 192 |
| 18 | 214 | 214 | 253 | 177 | 206 | 236 | 228 | 370 | 517 | 310 | 206 | 184 |
| 19 | 185 | 226 | 253 | 177 | 206 | 236 | 221 | 388 | 517 | 318 | 192 | 177 |
| 20 | 194 | 239 | 253 | 192 | 206 | 221 | 236 | 405 | 498 | 310 | 177 | 184 |
| 21 | 203 | 226 | 253 | 206 | 206 | 206 | 228 | 405 | 478 | 301 | 192 | 192 |
| 22 | 194 | 226 | 253 | 206 | 206 | 214 | 221 | 405 | 478 | 310 | 206 | 184 |
| 23 | 185 | 226 | 253 | 206 | 206 | 221 | 244 | 423 | 405 | 318 | 192 | 177 |
| 24 | 203 | 214 | 253 | 206 | 214 | 214 | 268 | 441 | 370 | 310 | 177 | 184 |
| 25 | 194 | 226 | 253 | 206 | 221 | 206 | 268 | 441 | 361 | 301 | 192 | 192 |
| 26 | 185 | 239 | 253 | 206 | 214 | 206 | 301 | 441 | 352 | 318 | 206 | 184 |
| 27 | 194 | 253 | 253 | 206 | 206 | 206 | 284 | 460 | 335 | 335 | 192 | 177 |
| 28 | 203 | 226 | 253 | 206 | 206 | 206 | 301 | 450 | 335 | 370 | 177 | 164 |
| 29 | 194 | 214 | 253 | 206 | ...... | 206 | 292 | 441 | 335 | 352 | 192 | 151 |
| 30 | 185 | 228 | 253 | 192 | ...... | 206 | 284 | 478 | 335 | 335 | 206 | 139 |
| 31 | 203 | ...... | 253 | 177 | ...... | 206 | ...... | 517 | ...... | 284 | 192 | ...... |
| **1910-11.** | | | | | | | | | | | | |
| 1 | 164 | 177 | 151 | 164 | 355 | 213 | 355 | 328 | 418 | 742 | 730 | 317 |
| 2 | 164 | 192 | 151 | 164 | 319 | 206 | 365 | 356 | 440 | 755 | 742 | 300 |
| 3 | 164 | 206 | 151 | 164 | 283 | 200 | 375 | 283 | 462 | 765 | 755 | 283 |
| 4 | 170 | 192 | 177 | 170 | 283 | 206 | 385 | 292 | 474 | 834 | 494 | 283 |
| 5 | 177 | 177 | 164 | 176 | 283 | 213 | 395 | 300 | 485 | 912 | 705 | 276 |
| 6 | 177 | 192 | 151 | 170 | 276 | 220 | 375 | 292 | 474 | 940 | 718 | 268 |
| 7 | 177 | 184 | 158 | 164 | 268 | 226 | 355 | 283 | 462 | 940 | 730 | 268 |
| 8 | 192 | 177 | 164 | 176 | 254 | 200 | 336 | 283 | 485 | 956 | 680 | 268 |
| 9 | 206 | 184 | 151 | 188 | 240 | 355 | 317 | 283 | 485 | 934 | 630 | 260 |
| 10 | 199 | 192 | 139 | 200 | 233 | 226 | 285 | 283 | 485 | 912 | 638 | 253 |
| 11 | 192 | 184 | 139 | 188 | 226 | 226 | 253 | 283 | 508 | 1,020 | 645 | 260 |
| 12 | 199 | 177 | 145 | 176 | 226 | 226 | 246 | 292 | 508 | 940 | 565 | 268 |
| 13 | 206 | 184 | 151 | 188 | 226 | 230 | 240 | 300 | 508 | 902 | 485 | 268 |
| 14 | 206 | 192 | 158 | 200 | 233 | 234 | 246 | 283 | 530 | 976 | 508 | 268 |
| 15 | 214 | 177 | 164 | 176 | 240 | 224 | 253 | 292 | 580 | 1,050 | 530 | 268 |
| 16 | 221 | 164 | 164 | 188 | 226 | 213 | 260 | 300 | 630 | 1,010 | 496 | 268 |
| 17 | 206 | 151 | 164 | 200 | 213 | 226 | 268 | 300 | 730 | 1,020 | 462 | 268 |
| 18 | 192 | 145 | 177 | 194 | 220 | 213 | 276 | 318 | 885 | 1,020 | 485 | 268 |
| 19 | 199 | 139 | 177 | 188 | 226 | 226 | 283 | 336 | 924 | 939 | 452 | 260 |
| 20 | 206 | 145 | 177 | 194 | 213 | 240 | 292 | 326 | 972 | 858 | 418 | 253 |
| 21 | 177 | 151 | 177 | 200 | 200 | 246 | 300 | 317 | 1,020 | 872 | 429 | 253 |
| 22 | 177 | 139 | 177 | 176 | 200 | 253 | 308 | 355 | 1,080 | 885 | 440 | 253 |
| 23 | 177 | 127 | 170 | 188 | 200 | 283 | 317 | 375 | 940 | 845 | 418 | 253 |
| 24 | 184 | 133 | 164 | 200 | 200 | 283 | 326 | 395 | 940 | 805 | 395 | 253 |
| 25 | 192 | 139 | 170 | 213 | 200 | 300 | 336 | 395 | 885 | 792 | 375 | 253 |
| 26 | 206 | 135 | 177 | 176 | 213 | 317 | 332 | 395 | 830 | 780 | 355 | 253 |
| 27 | 206 | 131 | 170 | 200 | 206 | 317 | 328 | 406 | 780 | 780 | 336 | 258 |
| 28 | 206 | 127 | 164 | 240 | 200 | 317 | 332 | 418 | 805 | 780 | 317 | 262 |
| 29 | 206 | 139 | 164 | 300 | ...... | 336 | 336 | 406 | 768 | 788 | 336 | 258 |
| 30 | 177 | 145 | 170 | 355 | ...... | 355 | 317 | 395 | 730 | 795 | 318 | 253 |
| 31 | 206 | ...... | 177 | 420 | ...... | 336 | ...... | 406 | ...... | 762 | 300 | ...... |

*Daily discharge, in second-feet, of Owens River near Round Valley, Cal., for 1903–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 252 | 255 | 217 | [illegible] | 176 | 300 | 233 | [illegible] | 465 |
| 2 | 253 | 240 | 221 | [illegible] | [illegible] | 316 | 229 | [illegible] | [illegible] |
| 3 | 253 | 244 | 211 | 164 | [illegible] | 335 | 228 | 300 | 402 |
| 4 | 250 | 240 | 208 | 164 | [illegible] | [illegible] | 243 | [illegible] | 400 |
| 5 | 262 | 253 | 208 | 164 | [illegible] | [illegible] | 236 | [illegible] | 415 |
| 6 | 253 | 248 | 213 | 168 | [illegible] | [illegible] | 232 | [illegible] | 400 |
| 7 | 240 | 240 | 208 | 170 | [illegible] | 221 | 221 | [illegible] | 386 |
| 8 | 253 | 240 | 208 | 164 | [illegible] | 224 | [illegible] | [illegible] | 380 |
| 9 | 244 | 240 | 204 | 150 | [illegible] | 223 | 227 | 300 | 340 |
| 10 | 254 | 241 | 208 | 167 | [illegible] | 228 | 300 | [illegible] | 331 |
| 11 | 244 | 240 | 204 | [illegible] | [illegible] | 227 | [illegible] | [illegible] | [illegible] |
| 12 | 253 | 246 | 204 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 253 | 252 | 208 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 252 | 237 | 204 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 253 | 213 | 204 | [illegible] | [illegible] | [illegible] | 300 | [illegible] | [illegible] |
| 16 | 253 | 218 | 208 | [illegible] | [illegible] | [illegible] | 239 | [illegible] | [illegible] |
| 17 | 253 | 223 | 208 | [illegible] | 200 | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | 253 | 234 | 204 | [illegible] | 200 | [illegible] | 200 | [illegible] | [illegible] |
| 19 | 255 | 228 | 204 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | 253 | 220 | 204 | [illegible] | 200 | [illegible] | 223 | [illegible] | 274 |
| 21 | 252 | 213 | 208 | [illegible] | 208 | [illegible] | 221 | [illegible] | [illegible] |
| 22 | 248 | 221 | 208 | [illegible] | 204 | [illegible] | [illegible] | 204 | 274 |
| 23 | 240 | 210 | 208 | [illegible] | 204 | 204 | [illegible] | [illegible] | 300 |
| 24 | 248 | 208 | 204 | [illegible] | [illegible] | [illegible] | 208 | [illegible] | 274 |
| 25 | 253 | 208 | 208 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 302 |
| 26 | 240 | 213 | 204 | [illegible] | [illegible] | [illegible] | [illegible] | 300 | 300 |
| 27 | 236 | 220 | 208 | [illegible] | 204 | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 232 | 228 | 204 | [illegible] | 204 | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 240 | 220 | 204 | [illegible] | 200 | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 223 | 213 | 208 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | 226 | | 208 | [illegible] | | [illegible] | | [illegible] | |

NOTE.—Daily discharge determined from fairly well defined rating curves applicable as follows: Jan. 1 to Dec 31, 1909; Jan. 1 to Dec. 31, 1910; Jan. 1 to Dec. 31, 1911; Jan. 1 to June 30, 1912. Discharge interpolated or estimated for days on which gage was not read.

*Monthly discharge of Owens River near Round Valley, Cal., for 1903–1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1903. | | | | | |
| August 4–31 | [illegible] | [illegible] | [illegible] | [illegible] | |
| September | [illegible] | [illegible] | [illegible] | [illegible] | |
| 1903–4. | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | |
| November | [illegible] | [illegible] | [illegible] | [illegible] | |
| December | [illegible] | [illegible] | [illegible] | [illegible] | |
| January | [illegible] | [illegible] | [illegible] | [illegible] | |
| February | [illegible] | [illegible] | [illegible] | [illegible] | |
| March | [illegible] | [illegible] | [illegible] | [illegible] | |
| April | [illegible] | [illegible] | [illegible] | [illegible] | |
| May | 442 | [illegible] | [illegible] | [illegible] | |
| June | [illegible] | [illegible] | [illegible] | [illegible] | |
| July | [illegible] | [illegible] | [illegible] | [illegible] | |
| August | [illegible] | [illegible] | [illegible] | [illegible] | |
| September | [illegible] | [illegible] | [illegible] | [illegible] | |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | |
| 1904–5. | | | | | |
| October | [illegible] | 221 | [illegible] | 16,356 | |
| November | [illegible] | [illegible] | [illegible] | 14,655 | |
| December | 246 | 172 | [illegible] | 13,404 | |
| January | 240 | [illegible] | 193 | 11,870 | |
| February | [illegible] | [illegible] | [illegible] | 10,880 | |
| March | [illegible] | [illegible] | 213 | 13,100 | |

*Monthly discharge of Owens River near Round Valley, Cal., for 1903–1912*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1904–5.** | | | | | |
| April | 211 | 158 | 177 | 10,530 | |
| May | 358 | 184 | 246 | 15,130 | |
| June | 533 | 271 | 392 | 23,330 | |
| July | 377 | 184 | 275 | 16,910 | |
| August | 211 | 146 | 169 | 10,390 | |
| September | 184 | 158 | 180 | 10,710 | |
| The year | 533 | 146 | 231 | 167,000 | |
| **1905–6.** | | | | | |
| October | 219 | 153 | 180 | 11,070 | |
| November | 219 | 153 | 197 | 11,720 | |
| December | 219 | 153 | 179 | 11,010 | |
| January | 257 | 162 | 198 | 12,200 | |
| February | 218 | 183 | 205 | 11,400 | |
| March | 355 | 206 | 270 | 16,600 | |
| April | 432 | 244 | 345 | 20,500 | |
| May | 405 | 270 | 328 | 20,200 | |
| June | 839 | 326 | 624 | 37,100 | |
| July | 732 | 663 | 696 | 42,800 | |
| August | 690 | 385 | 535 | 32,900 | |
| September | 385 | 284 | 330 | 19,900 | |
| The year | 839 | 153 | 341 | 247,000 | |
| **1906–7.** | | | | | |
| October | 312 | 244 | 273 | 16,800 | |
| November | 257 | 218 | 239 | 14,200 | |
| December | 270 | 218 | 256 | 15,700 | |
| January | 284 | 183 | 247 | 15,200 | A. |
| February | 312 | 257 | 281 | 15,600 | A. |
| March | 929 | 231 | 341 | 21,000 | B. |
| April | | | 270 | 16,100 | D. |
| May | | | 438 | 26,900 | D. |
| June | 1,190 | 387 | 616 | 36,700 | B. |
| July | 932 | 710 | 856 | 52,600 | B. |
| August | 836 | 307 | 432 | 26,600 | B. |
| September | 342 | 278 | 305 | 18,100 | B. |
| The year | 1,190 | 183 | 380 | 276,000 | |
| **1907–8.** | | | | | |
| October | 324 | 266 | 285 | 17,500 | B. |
| November | 266 | 242 | 252 | 15,000 | B. |
| December | 278 | 220 | 245 | 15,100 | B. |
| January | 253 | 210 | 227 | 14,000 | B. |
| February | 242 | 210 | 223 | 12,800 | B. |
| March | 441 | 210 | 279 | 17,200 | B. |
| April | 342 | 210 | 242 | 14,400 | B. |
| May | 342 | 253 | 274 | 16,800 | B. |
| June | 386 | 266 | 313 | 18,600 | B. |
| July | 342 | 253 | 289 | 17,800 | B. |
| August | 342 | 231 | 264 | 16,200 | B. |
| September | 253 | 191 | 222 | 13,200 | B. |
| The year | 441 | 191 | 260 | 189,000 | |
| **1908–9.** | | | | | |
| October | 210 | 182 | 192 | 11,800 | B. |
| November | 191 | 182 | 184 | 10,900 | B. |
| December | 191 | 174 | 182 | 11,200 | B. |
| January | 358 | 170 | 235 | 14,400 | B. |
| February | 253 | 149 | 186 | 10,300 | C. |
| March | 208 | 149 | 179 | 11,000 | C. |
| April | 516 | 253 | 374 | 22,300 | B. |
| May | 306 | 253 | 317 | 19,400 | B. |
| June | 756 | 436 | 637 | 37,900 | A. |
| July | 836 | 358 | 531 | 32,600 | A. |
| August | 358 | 239 | 296 | 18,200 | B. |
| September | 253 | 185 | 211 | 12,600 | B. |
| The year | 836 | 149 | 294 | 213,000 | |
| **1909–10.** | | | | | |
| October | 214 | 170 | 188 | 11,600 | B. |
| November | 253 | 185 | 217 | 12,900 | B. |
| December | 285 | 226 | 249 | 15,300 | B. |
| | 370 | 177 | 222 | 13,600 | B. |
| | 221 | 177 | 201 | 11,200 | B. |

*Monthly discharge of Owens River near [illegible] Valley, Cal., for 19[illegible]–19[illegible] — Continued.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1909–10.** | | | | | |
| March | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] | |
| September | [illegible] | 13 | [illegible] | 1,[illegible] | [illegible] |
| The year | [illegible] | 13 | [illegible] | [illegible] | |
| **1910–11.** | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | |
| December | [illegible] | 13 | [illegible] | 1,[illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | 1,[illegible] | |
| February | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| May | 41[illegible] | [illegible] | [illegible] | 2,[illegible] | [illegible] |
| June | [illegible] | 41 | [illegible] | 4,[illegible] | |
| July | [illegible] | [illegible] | [illegible] | [illegible] | |
| August | [illegible] | [illegible] | [illegible] | [illegible] | |
| September | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1911–12.** | | | | | |
| October | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | 1,[illegible] | |
| May | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| The period | | | | [illegible] | |

NOTE.—Monthly mean estimated for April and May [illegible]. Discharge interpolated for days on which gage was not read.

## OWENS RIVER NEAR TINEMAHA, CAL.

This station, which is located at a [illegible] knoll known as [illegible] Butte, in the floor of the valley about 7 miles south of Tinemaha, in sec. 2, T. 11 S., R. 34 E., was regularly established September [illegible], but the city of Los Angeles has made frequent measurements since the beginning of 1906.

Tinemaha Creek is the first tributary above and [illegible] the next below the station. There are diversions for irrigation above the station.

The gage is a vertical staff on the left bank; its datum has not been changed since the station was established.

Discharge measurements are made from a car and cable at the gage. When the discharge exceeds 1,[illegible] second-feet the river overflows the left bank and the station is inaccessible. At such times measurements are made from the county bridge near Citrus.

The channel is composed of sand and gravel and is somewhat shifting.

All stations in Owens Valley except those on Owens River are near the western margin of the valley, and most of them are below the delta fans, which extend eastward from the mouths of the canyons and are above all diversions. Nearly all measurements are made from footbridges or by wading. The current is swift at almost every station, and the channel is subject to more or less change.

### OWENS LAKE NEAR OLANCHA, CAL.

This station was first established in March, 1908, near the old Smith ranch. The gage, which was a 2-inch by 6-inch pine board, was submerged in the early part of July, 1911, and a new gage set at the same location. During September, 1911, the gage was washed out and the station was moved to a point 1 mile north of Brier, where a gage was installed November 1, 1911. Gage heights represent elevation of water surface above sea level.

*Elevation of Owens Lake near Olancha, Cal., 1908–1911.*

| Date. | Elevation of water surface. | Date. | Elevation of water surface. |
|---|---|---|---|
| 1908. | *Feet.* | 1911. | *Feet.* |
| Mar. 4 | 3,575.95 | Jan. 3 | 3,575.29 |
| 30 | 3,575.73 | Feb. 8 | 3,576.11 |
| Apr. 19 | 3,575.78 | July 12 | 3,577.35 |
| 28 | 3,575.90 | 28 | 3,578.03 |
| May 28 | 3,575.80 | Nov. 1 | 3,577.35 |
| June 4 | 3,575.40 | 3 | 3,577.50 |
| | | Dec. 3 | 3,577.60 |
| 1910. | | | |
| July 22 | 3,573.9[illegible] | | |
| Sept. 21 | 3,574.35 | | |
| Oct. 28 | 3,574.7[illegible] | | |
| Dec. 1 | 3,574.99 | | |

### OWENS RIVER NEAR ROUND VALLEY, CAL.

This station, which is now located 600 feet above the junction of Owens River and Rock Creek, in sec. 10, T. 6 S., R. 31 E., was established August 3, 1903, at a footbridge 100 feet above the present site, to which it was removed May 27, 1907, as the original station had been destroyed on March 19 of that year.

No important streams enter above and Rock Creek is the first tributary below the station. No ditches take water above the gage, but several divert from the main river and its tributaries below the station, the first one being the Owens River canal, which heads 3 miles below the mouth of Rock Creek. The drainage area above the station is approximately 450 square miles.

The gage, which is a vertical staff on the left bank, was not referred to the datum of the original gage.

Discharge measurements are made from a car and cable at the gage.

The channel is composed of rock and lava bowlders and changes little.

*Discharge measurements of Owens River near Round Valley, Cal., in 1903-1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | Feet. | Sec.-ft. | 1908. | | Feet. | Sec.-ft. |
| Aug. 3 | R. S. Hawley | 1.80 | 162 | Feb. 22 | R. B. Post | 2.30 | 228 |
| 9 | do | 1.95 | 160 | Mar. 29 | do | 2.13 | 236 |
| 18 | do | 1.75 | 159 | May 12 | do | 2.2 | 222 |
| 22 | do | 1.75 | 160 | June 18 | do | 2.35 | 256 |
| Sept. 1 | do | 1.74 | 159 | July 15 | W. A. Lamb | 2.38 | 287 |
| 12 | do | 1.90 | 175 | Aug. 4 | do | 2.43 | 311 |
| Oct. 8 | do | 1.85 | 185 | 25 | do | 2.23 | 240 |
| 25 | do | 1.82 | 173 | Sept. 17 | do | 2.1 | 220 |
| Nov. 24 | do | 1.96 | 196 | Oct. 8 | do | 1.98 | 198 |
| Dec. 29 | do | 1.70 | 151 | 23 | Barrows and Lamb | 2.00 | 200 |
| | | | | Nov. 7 | do | 2.00 | 187 |
| 1904. | | | | | | | |
| Jan. 25 | R. S. Hawley | 1.80 | 184 | 1909. | | | |
| Mar. 2 | do | 2.20 | 270 | Jan. 22 | Haines and Lee | 2.34 | 264 |
| 28 | do | 2.55 | 458 | Feb. 11 | R. E. Haines | 2.14 | 211 |
| Apr. 8 | Murphy, Bennett, and Hawley | 1.87 | 196 | 27 | do | 2.02 | 187 |
| 27 | R. S. Hawley | 1.82 | 190 | Mar. 18 | do | 2.10 | 218 |
| June 2 | do | 2.57 | 353 | Apr. 8 | do | 2.48 | 292 |
| 15 | do | 3.10 | 564 | 29 | do | 2.30 | 224 |
| July 13 | Clausen and Barnes | 2.55 | 380 | May 19 | do | 2.38 | 294 |
| Aug. 3 | L. M. Barnes | 2.40 | 324 | June 10 | do | 3.13 | 574 |
| Sept. 9 | R. S. Hawley | 2.01 | 232 | 30 | do | 3.48 | 710 |
| Oct. 13 | Hawley, Clapp, and Taylor | 2.25 | 269 | July 23 | do | 2.75 | 430 |
| Nov. 12 | R. J. Taylor | 2.00 | 218 | Aug. 11 | do | 2.40 | 295 |
| Dec. 6 | do | 1.85 | 155 | Sept. 1 | do | 2.30 | 256 |
| | | | | 22 | do | 2.11 | 209 |
| 1905. | | | | Oct. 13 | do | 2.09 | 201 |
| Jan. 16 | R. J. Taylor | 1.97 | 184 | Nov. 3 | do | 2.00 | 193 |
| Feb. 9 | do | 1.95 | 175 | 24 | do | 2.16 | 216 |
| Apr. 4 | J. S. Evans | 2.00 | 179 | | | | |
| May 22 | do | 2.39 | 306 | 1910. | | | |
| June 27 | do | 2.58 | 382 | Mar. 9 | R. E. Haines | 2.56 | 352 |
| July 25 | do | 2.15 | 207 | 30 | do | 2.12 | 218 |
| Aug. 15 | do | 1.90 | 154 | Apr. 21 | do | 2.20 | 242 |
| Sept. 8 | do | 2.00 | 177 | May 11 | do | 2.40 | 300 |
| 27 | do | 1.90 | 155 | June 24 | C. H. Lee | 2.53 | 348 |
| Nov. 2 | F. R. S. Buttemer | 1.80 | 164 | July 11 | do | 2.43 | 312 |
| 24 | do | 1.85 | 180 | Aug. 2 | do | 2.32 | 288 |
| Dec. 10 | do | 1.73 | 151 | 24 | F. G. Wood | 2.07 | 201 |
| | | | | Sept. 17 | G. T. Peekema | 2.02 | 175 |
| 1906. | | | | Oct. 22 | do | 2.02 | 183 |
| Jan. 8 | F. R. S. Buttemer | 1.75 | 161 | Nov. 18 | do | 2.03 | 189 |
| 14 | do | 1.92 | 196 | Dec. 21 | do | 1.98 | 164 |
| 14 | do | 1.93 | 191 | | | | |
| Aug. 23 | Hawley and Shuey | 2.85 | 465 | 1911. | | | |
| Nov. 3 | G. R. Shuey | 2.14 | 261 | Jan. 25 | G. T. Peekema | 2.15 | 206 |
| 30 | do | 2.00 | 214 | Mar. 12 | C. H. Lee | 2.20 | 220 |
| | | | | May 5 | do | 2.45 | 288 |
| 1907. | | | | June 26 | do | 3.40 | 757 |
| Jan. 25 | G. R. Shuey | 2.15 | 261 | July 7 | do | 3.82 | 919 |
| Feb. 12 | do | 2.17 | 254 | Aug. 3 | J. E. Jones | 2.92 | 466 |
| Mar. 12 | do | 2.06 | 232 | 24 | do | 2.50 | 342 |
| May 14 | do | ........ | 350 | Sept. 20 | do | 2.30 | 232 |
| Aug. 4[a] | Shuey and Post | 3.25 | 709 | Oct. 24 | do | 2.25 | 250 |
| 8 | R. B. Post | 3.00 | 566 | Nov. 22 | do | 2.18 | 223 |
| 24 | do | 2.61 | 369 | Dec. 13 | do | 2.10 | 201 |
| Sept. 7 | do | 2.52 | 300 | | | | |
| 23 | do | 2.40 | 260 | 1912. | | | |
| Oct. 5 | do | 2.35 | 251 | Jan. 17 | J. E. Jones | 2.15 | 218 |
| 28 | do | 2.50 | 278 | Feb. 21 | do | 2.10 | 190 |
| Nov. 17 | do | 2.28 | 233 | Mar. 20 | do | 2.12 | 212 |
| Dec. 8 | do | 2.26 | 243 | Apr. 16 | do | 2.20 | 227 |
| | | | | May 9 | do | 2.08 | 192 |
| | | | | 22 | do | 2.12 | 225 |
| | | | | June 12 | do | 2.46 | 307 |

[a] Beginning Aug. 4, 1907, the gage heights refer to the new gage established May 29, 1907.

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1903–1912.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | | 1.75 | 11 | 1.8 | 1.8 | 21 | 1.68 | 1.8 |
| 2 | | 1.75 | 12 | 1.9 | 1.8 | 22 | 1.72 | 1.8 |
| 3 | | 1.75 | 13 | 1.9 | 1.8 | 23 | 1.8 | 1.8 |
| 4 | 1.8 | 1.73 | 14 | 1.9 | 1.8 | 24 | 1.75 | 1.78 |
| 5 | 1.8 | 1.7 | 15 | 1.8 | 1.8 | 25 | 1.8 | 1.77 |
| 6 | 1.8 | 1.72 | 16 | 1.8 | 1.8 | 26 | 1.8 | 1.8 |
| 7 | 1.8 | 1.73 | 17 | 1.8 | 1.7 | 27 | 1.78 | 1.8 |
| 8 | 1.8 | 1.75 | 18 | 1.75 | 1.8 | 28 | 1.72 | 1.8 |
| 9 | 1.85 | 1.77 | 19 | 1.75 | 1.8 | 29 | 1.7 | 1.8 |
| 10 | 1.8 | 1.8 | 20 | 1.75 | 1.8 | 30 | 1.7 | 1.78 |
| | | | | | | 31 | 1.7 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | | |
| 1 | 1.77 | 1.8 | 1.8 | 1.7 | 1.85 | 2.2 | 2.0 | 1.8 | 2.6 | 3.0 | 2.7 | 2.3 |
| 2 | 1.8 | 1.8 | 1.8 | 1.7 | 1.85 | 2.2 | 2.0 | 1.8 | 2.6 | 2.9 | 2.6 | 2.25 |
| 3 | 1.8 | 1.8 | 1.8 | 1.7 | 1.8 | 2.2 | 2.0 | 1.8 | 2.8 | 3.0 | 2.5 | 2.2 |
| 4 | 1.83 | 1.8 | 1.7 | 1.7 | 1.85 | 2.2 | 1.9 | 1.8 | 2.9 | 3.0 | 2.5 | 2.1 |
| 5 | 1.8 | 1.8 | 1.7 | 1.7 | 1.85 | 2.2 | 1.9 | 1.85 | 2.9 | 3.0 | 2.45 | 2.1 |
| 6 | 1.8 | 1.75 | 1.7 | 1.7 | 1.8 | 2.2 | 1.9 | 1.9 | 3.0 | 3.0 | 2.4 | 2.1 |
| 7 | 1.8 | 1.7 | 1.7 | 1.7 | 1.8 | 2.1 | 1.9 | 1.95 | 3.0 | 2.9 | 2.5 | 2.2 |
| 8 | 1.82 | 1.7 | 1.7 | 1.7 | 1.8 | 2.1 | 1.9 | 2.0 | 2.9 | 2.9 | 2.6 | 2.2 |
| 9 | 1.8 | 1.7 | 1.7 | 1.7 | 1.85 | 1.9 | 1.9 | 2.0 | 2.9 | 2.9 | 2.7 | 2.15 |
| 10 | 1.83 | 1.7 | 1.7 | 1.7 | 1.85 | 2.0 | 1.9 | 2.1 | 3.0 | 2.9 | 2.7 | 2.15 |
| 11 | 1.8 | 1.7 | 1.7 | 1.7 | 1.9 | 2.0 | 1.9 | 2.1 | 3.0 | 2.85 | 2.6 | 2.15 |
| 12 | 1.8 | 1.7 | 1.7 | 1.7 | 1.9 | 1.9 | 1.9 | 2.2 | 3.0 | 2.85 | 2.6 | 2.1 |
| 13 | 1.8 | 1.7 | 1.7 | 1.7 | 1.9 | 1.9 | 2.0 | 2.2 | 3.0 | 2.9 | 2.6 | 2.0 |
| 14 | 1.82 | 1.7 | 1.7 | 1.7 | 2.0 | 1.9 | 2.1 | 2.2 | 3.0 | 2.8 | 2.6 | 2.0 |
| 15 | 1.8 | 1.7 | 1.7 | 1.7 | 1.95 | 2.2 | 2.0 | 2.4 | 3.1 | 2.6 | 2.45 | 2.1 |
| 16 | 1.8 | 1.7 | 1.8 | 1.7 | 2.5 | 2.2 | 2.0 | 2.5 | 3.4 | 2.6 | 2.55 | 2.1 |
| 17 | 1.8 | 1.7 | 1.8 | 1.7 | 2.25 | 2.2 | 1.9 | 2.5 | 3.4 | 2.55 | 2.5 | 2.1 |
| 18 | 1.8 | 1.7 | 1.8 | 1.7 | 1.95 | 2.2 | 1.9 | 2.5 | 3.3 | 2.55 | 2.45 | 2.1 |
| 19 | 1.8 | 1.7 | 1.8 | 1.7 | 1.9 | 2.2 | 2.0 | 2.5 | 3.3 | 2.5 | 2.4 | 2.0 |
| 20 | 1.8 | 1.7 | 1.8 | 1.7 | 2.0 | 2.2 | 1.9 | 2.4 | 3.4 | 2.5 | 2.25 | 2.0 |
| 21 | 1.8 | 1.7 | 1.8 | 1.7 | 1.95 | 2.2 | 1.9 | 2.4 | 3.3 | 2.5 | 2.3 | 2.0 |
| 22 | 1.8 | 1.7 | 1.8 | 1.7 | 2.0 | 2.2 | 1.9 | 2.4 | 3.3 | 2.65 | 2.25 | 2.0 |
| 23 | 1.8 | 1.8 | 1.8 | 1.7 | 2.3 | 2.2 | 1.9 | 2.4 | 3.2 | 2.7 | 2.25 | 2.1 |
| 24 | 1.8 | 1.9 | 1.8 | 1.75 | 2.3 | 2.1 | 1.85 | 2.5 | 3.3 | 2.6 | 2.3 | 2.9 |
| 25 | 1.8 | 1.9 | 1.8 | 1.8 | 2.3 | 2.1 | 1.85 | 2.7 | 3.2 | 2.55 | 2.3 | 2.95 |
| 26 | 1.8 | 1.8 | 1.8 | 1.8 | 2.3 | 2.1 | 1.9 | 2.8 | 3.1 | 2.55 | 2.3 | 2.6 |
| 27 | 1.8 | 1.8 | 1.7 | 1.7 | 2.2 | 2.1 | 1.9 | 2.8 | 3.2 | 2.7 | 2.3 | 2.55 |
| 28 | 1.8 | 1.8 | 1.7 | 1.8 | 2.0 | 2.85 | 1.9 | 2.8 | 3.2 | 2.7 | 2.3 | 2.45 |
| 29 | 1.8 | 1.8 | 1.7 | 1.8 | 2.0 | 2.6 | 1.85 | 2.6 | 3.1 | 2.65 | 2.3 | 2.4 |
| 30 | 1.8 | 1.8 | 1.7 | 1.8 | ...... | 2.0 | 1.8 | 2.6 | 3.1 | 2.7 | 2.3 | 2.4 |
| 31 | 1.7 | ...... | 1.7 | 1.85 | ...... | 1.95 | ...... | 2.55 | ...... | 2.8 | 2.25 | ...... |
| 1904–5. | | | | | | | | | | | | |
| 1 | 2.3 | 2.15 | 2.1 | 2.15 | 2.2 | 2.2 | 1.9 | 2.1 | 2.3 | 2.5 | 2.1 | 1.9 |
| 2 | 2.3 | 2.15 | 2.1 | 2.1 | 2.15 | 2.25 | 1.95 | 2.1 | 2.3 | 2.5 | 2.05 | 1.9 |
| 3 | 2.2 | 2.15 | 2.1 | 2.1 | 2.1 | 2.2 | 2.0 | 2.1 | 2.3 | 2.6 | 2.05 | 1.9 |
| 4 | 2.2 | 2.2 | 2.1 | 2.0 | 2.1 | 2.2 | 2.0 | 2.1 | 2.3 | 2.6 | 2.0 | 1.9 |
| 5 | 2.15 | 2.3 | 2.1 | 2.0 | 2.1 | 2.2 | 2.0 | 2.1 | 2.3 | 2.6 | 2.0 | 1.95 |
| 6 | 2.10 | 2.2 | 2.1 | 2.0 | 2.0 | 2.25 | 2.0 | 2.05 | 2.3 | 2.6 | 1.95 | 2.0 |
| 7 | 2.15 | 2.1 | 2.0 | 2.0 | 2.1 | 2.25 | 2.0 | 2.0 | 2.35 | 2.5 | 1.95 | 2.0 |
| 8 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.0 | 2.0 | 2.35 | 2.5 | 2.0 | 2.0 |
| 9 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.4 | 2.5 | 2.0 | 2.0 |
| 10 | 2.25 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.4 | 2.5 | 2.0 | 2.0 |
| 11 | 2.3 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.4 | 2.5 | 1.9 | 2.0 |
| 12 | 2.3 | 2.1 | 2.0 | 1.95 | 2.0 | 2.0 | 2.0 | 2.0 | 2.55 | 2.45 | 1.9 | 2.0 |
| 13 | 2.25 | 2.1 | 2.0 | 1.95 | 2.0 | 2.5 | 2.0 | 2.0 | 2.7 | 2.4 | 1.9 | 2.0 |
| 14 | 2.25 | 2.1 | 2.0 | 1.9 | 2.0 | 2.15 | 1.95 | 2.0 | 2.75 | 2.4 | 2.0 | 2.0 |
| 15 | 2.2 | 2.1 | 2.05 | 1.9 | 2.0 | 2.15 | 1.9 | 2.0 | 2.75 | 2.4 | 2.0 | 2.0 |
| 16 | 2.2 | 2.1 | 2.05 | 1.9 | 2.0 | 2.15 | 1.9 | 2.0 | 2.75 | 2.3 | 2.0 | 2.0 |
| 17 | 2.1 | 2.1 | 2.05 | 1.95 | 2.0 | 2.1 | 1.95 | 2.2 | 3.0 | 2.2 | 1.9 | 2.0 |
| 18 | 2.0 | 2.1 | 2.05 | 1.95 | 2.1 | 2.1 | 1.95 | 2.35 | 3.0 | 2.2 | 1.9 | 2.0 |
| 19 | 2.15 | 2.1 | 2.0 | 2.0 | 2.2 | 2.05 | 1.95 | 2.35 | 3.0 | 2.2 | 1.9 | 2.0 |
| 20 | 2.15 | 2.1 | 2.0 | 2.0 | 2.1 | 2.05 | 1.95 | 2.4 | 3.0 | 2.2 | 1.85 | 2.0 |

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1903–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 21 | 2.2 | 2.1 | 1.95 | 2.1 | 2.0 | 2.1 | 1.9 | 2.4 | 3.0 | 2.15 | 1.85 | 2.0 |
| 22 | 2.15 | 2.1 | 1.9 | 2.1 | 1.95 | 2.1 | 1.9 | 2.4 | 3.0 | 2.1 | 1.9 | 2.0 |
| 23 | 2.15 | 2.1 | 1.85 | 2.0 | 1.95 | 2.1 | 1.9 | 2.4 | 3.0 | 2.1 | 1.9 | 2.0 |
| 24 | 2.15 | 2.1 | 1.8 | 2.0 | 1.9 | 2.0 | 1.95 | 2.4 | 2.95 | 2.1 | 1.9 | 2.0 |
| 25 | 2.15 | 2.0 | 1.8 | 2.1 | 1.85 | 2.0 | 1.95 | 2.4 | 2.8 | 2.1 | 1.9 | 2.0 |
| 26 | 2.15 | 2.0 | 1.8 | 2.1 | 1.85 | 2.0 | 1.95 | 2.4 | 2.7 | 2.0 | 1.9 | 2.0 |
| 27 | 2.15 | 2.0 | 1.9 | 2.1 | 2.0 | 2.0 | 1.95 | 2.45 | 2.6 | 2.0 | 1.9 | 2.0 |
| 28 | 2.15 | 2.0 | 1.95 | 2.1 | 2.1 | 1.95 | 2.0 | 2.55 | 2.6 | 2.0 | 1.9 | 2.0 |
| 29 | 2.1 | 2.0 | 1.9 | 2.1 | | 1.9 | 2.05 | 2.5 | 2.55 | 2.0 | 1.9 | 2.0 |
| 30 | 2.1 | 2.0 | 2.0 | 2.2 | | 1.9 | 2.05 | 2.4 | 2.5 | 2.0 | 1.9 | 2.0 |
| 31 | 2.1 | | 2.0 | 2.2 | | 1.9 | | 2.3 | | 2.0 | 1.9 | |
| **1905–6.** | | | | | | | | | | | | |
| 1 | 2.0 | 1.8 | 1.9 | 1.8 | 1.85 | 1.95 | 2.45 | 2.25 | 2.4 | 3.5 | 3.5 | 2.6 |
| 2 | 2.0 | 1.8 | 1.9 | 1.8 | 1.9 | 1.95 | 2.4 | 2.3 | 2.45 | 3.55 | 3.5 | 2.6 |
| 3 | 2.0 | 1.75 | 1.95 | 1.8 | 1.9 | 1.95 | 2.4 | 2.35 | 2.4 | 3.5 | 3.45 | 2.6 |
| 4 | 1.95 | 1.75 | 1.95 | 1.8 | 1.9 | 1.95 | 2.4 | 2.3 | 2.45 | 3.45 | 3.45 | 2.6 |
| 5 | 1.95 | 1.8 | 1.95 | 1.8 | 1.9 | 1.95 | 2.25 | 2.3 | 2.5 | (a) | 3.4 | 2.6 |
| 6 | 1.9 | 1.8 | 2.0 | 1.8 | 1.9 | 1.95 | 2.1 | 2.25 | 2.6 | | 3.3 | 2.55 |
| 7 | 1.9 | 1.85 | 2.0 | 1.75 | 1.9 | 2.0 | 2.15 | 2.2 | 2.7 | | 3.3 | 2.5 |
| 8 | 1.9 | 1.85 | 2.0 | 1.75 | 1.9 | 2.0 | 2.3 | 2.25 | 2.9 | | 3.3 | 2.5 |
| 9 | 1.9 | 1.9 | 1.95 | 1.75 | 1.95 | 2.0 | 2.5 | 2.2 | 3.9 | | 3.25 | 2.45 |
| 10 | 1.95 | 1.9 | 1.9 | 1.75 | 1.95 | 2.0 | 2.6 | 2.25 | 3.95 | | 3.25 | 2.45 |
| 11 | 1.95 | 1.9 | 1.9 | 1.8 | 1.95 | 2.1 | 2.7 | 2.35 | 3.0 | | 3.2 | 2.45 |
| 12 | 2.0 | 1.9 | 1.9 | 1.8 | 1.95 | 2.3 | 2.7 | 2.5 | 3.25 | | 3.1 | 2.45 |
| 13 | 2.0 | 1.9 | 1.9 | 1.9 | 1.95 | 2.25 | 2.75 | 2.45 | 3.3 | | 3.1 | 2.45 |
| 14 | 2.0 | 1.95 | 1.85 | 1.9 | 1.95 | 2.2 | 2.7 | 2.4 | 3.4 | | 3.1 | 2.4 |
| 15 | 2.0 | 2.0 | 1.85 | 1.9 | 1.95 | 2.2 | 2.65 | 2.4 | 3.4 | | 3.05 | 2.4 |
| 16 | 2.0 | 2.0 | 1.85 | 1.9 | 1.95 | 2.25 | 2.7 | 2.4 | 3.45 | | 3.0 | 2.4 |
| 17 | 1.95 | 2.0 | 1.8 | 1.95 | 1.95 | 2.25 | 2.7 | 2.4 | 3.45 | | 2.95 | 2.4 |
| 18 | 1.95 | 2.0 | 1.8 | 2.15 | 1.95 | 2.25 | 2.7 | 2.45 | 3.5 | | 2.95 | 2.4 |
| 19 | 1.9 | 2.0 | 1.8 | 2.1 | 1.95 | 2.3 | 2.7 | 2.6 | 3.55 | | 3.1 | 2.35 |
| 20 | 1.85 | 2.0 | 1.75 | 2.0 | 1.95 | 2.3 | 2.7 | 2.65 | 3.6 | | 3.2 | 2.35 |
| 21 | 1.85 | 2.0 | 1.75 | 2.0 | 2.0 | 2.35 | 2.6 | 2.6 | 3.7 | | 3.2 | 2.3 |
| 22 | 1.85 | 2.0 | 1.75 | 2.1 | 2.0 | 2.35 | 2.6 | 2.55 | 3.75 | | 3.1 | 2.3 |
| 23 | 1.85 | 2.0 | 1.75 | 2.1 | 2.0 | 2.35 | 2.5 | 2.5 | 3.85 | | 2.85 | 2.25 |
| 24 | 1.85 | 2.0 | 1.75 | 2.1 | 2.0 | 2.4 | 2.35 | 2.5 | 3.9 | | 2.85 | 2.25 |
| 25 | 1.8 | 2.0 | 1.75 | 2.1 | 2.0 | 2.35 | 2.25 | 2.5 | 3.9 | | 2.85 | 2.25 |
| 26 | 1.8 | 2.0 | 1.8 | 2.05 | 2.0 | 2.4 | 2.2 | 2.5 | 3.9 | | 2.7 | 2.3 |
| 27 | 1.75 | 2.0 | 1.8 | 2.0 | 1.95 | 2.35 | 2.15 | 2.5 | 3.7 | | 2.6 | 2.3 |
| 28 | 1.75 | 1.95 | 1.8 | 2.0 | 1.95 | 2.3 | 2.15 | 2.45 | 3.65 | | 2.6 | 2.3 |
| 29 | 1.75 | 1.9 | 1.8 | 1.95 | | 2.3 | 2.2 | 2.4 | 3.5 | 3.65 | 2.6 | 2.3 |
| 30 | 1.75 | 1.9 | 1.8 | 1.9 | | 2.35 | 2.2 | 2.45 | 3.6 | 3.6 | 2.6 | 2.3 |
| 31 | 1.75 | | 1.8 | 1.9 | | 2.5 | | 2.4 | | 3.6 | 2.6 | |
| **1906–7.** | | | | | | | | | | | | |
| 1 | 2.3 | 2.15 | 2.0 | 2.15 | 2.2 | 2.25 | | | 3.0 | 3.6 | 3.45 | 2.5 |
| 2 | 2.3 | 2.15 | 2.0 | 2.1 | 2.2 | 2.3 | | | 3.2 | 3.6 | 3.45 | 2.5 |
| 3 | 2.3 | 2.15 | 2.05 | 2.0 | 2.25 | 2.3 | | | 3.4 | 3.6 | 3.45 | 2.5 |
| 4 | 2.35 | 2.15 | 2.1 | 1.95 | 2.3 | 2.35 | | | 3.4 | 3.6 | 3.4 | 2.5 |
| 5 | 2.35 | 2.15 | 2.1 | 1.85 | 2.3 | 2.4 | | | 3.35 | 3.6 | 3.3 | 2.5 |
| 6 | 2.35 | 2.15 | 2.1 | 1.9 | 2.35 | 2.4 | | | 3.2 | 3.6 | 3.2 | 2.5 |
| 7 | 2.3 | 2.15 | 2.1 | 1.9 | 2.35 | 2.35 | | | 3.1 | 3.6 | 3.2 | 2.5 |
| 8 | 2.3 | 2.1 | 2.1 | 1.95 | 2.3 | 2.3 | | | 3.1 | 3.6 | 3.1 | 2.5 |
| 9 | 2.3 | 2.1 | 2.15 | 2.0 | 2.2 | 2.25 | | | 3.05 | 3.6 | 3.0 | 2.5 |
| 10 | 2.3 | 2.1 | 2.15 | 2.1 | 2.2 | 2.25 | | | 3.0 | 3.6 | 2.9 | 2.5 |
| 11 | 2.25 | 2.1 | 2.2 | 2.15 | 2.2 | 2.2 | | | 3.0 | 3.6 | 2.9 | 2.5 |
| 12 | 2.2 | 2.1 | 2.2 | 2.15 | 2.2 | 2.05 | | | 3.0 | 3.6 | 2.9 | 2.55 |
| 13 | 2.2 | 2.1 | 2.2 | 2.15 | 2.2 | 2.25 | | | 2.9 | 3.6 | 2.85 | 2.55 |
| 14 | 2.2 | 2.1 | 2.2 | 2.15 | 2.2 | 2.3 | | | 2.8 | 3.55 | 2.85 | 2.55 |
| 15 | 2.2 | 2.05 | 2.2 | 2.15 | 2.2 | 2.3 | | | 2.8 | 3.5 | 2.85 | 2.5 |
| 16 | 2.2 | 2.05 | 2.2 | 2.15 | 2.3 | 2.25 | | | 2.8 | 3.45 | 2.85 | 2.5 |
| 17 | 2.2 | 2.0 | 2.2 | 2.15 | 2.25 | 2.5 | | | 3.0 | 3.4 | 2.8 | 2.55 |
| 18 | 2.2 | 2.0 | 2.2 | 2.15 | 2.2 | 4.2 | | | 3.1 | 3.4 | 2.8 | 2.55 |
| 19 | 2.2 | 2.0 | 2.15 | 2.15 | 2.2 | 3.0 | | | 2.8 | 3.4 | 2.75 | 2.6 |
| 20 | 2.15 | 2.0 | 2.15 | 2.15 | 2.25 | 2.5 | | | 2.7 | 3.4 | 2.75 | 2.6 |
| 21 | 2.15 | 2.0 | 2.1 | 2.2 | 2.25 | 2.7 | | | 3.0 | 3.4 | 2.7 | 2.55 |
| 22 | 2.15 | 2.0 | 2.1 | 2.2 | 2.3 | 2.5 | | | 3.0 | 3.35 | 2.7 | 2.5 |
| 23 | 2.1 | 2.0 | 2.15 | 2 2 | 2.35 | 2.5 | | | 3.1 | 3.3 | 2.65 | 2.4 |
| 24 | 2.1 | 2.0 | 2.15 | 2.15 | 2.25 | 2.4 | | | 3.0 | 3.25 | 2.6 | 2.4 |
| 25 | 2.1 | 2.05 | 2.15 | 2.15 | 2.2 | 2.4 | | | 3.0 | 3.3 | 2.6 | 2.4 |

[a] Station discontinued; operations resumed July 29.

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1903–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 26. | 2.1 | 2.1 | 2.15 | 2.15 | 2.15 | 2.4 | | | 3.1 | 3.35 | 2.6 | 2.4 |
| 27. | 2.1 | 2.1 | 2.2 | 2.15 | 2.15 | 2.4 | | | 3.25 | 3.4 | 2.55 | 2.4 |
| 28. | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.4 | | | 3.3 | 3.4 | 2.55 | 2.4 |
| 29. | 2.1 | 2.1 | 2.2 | 2.2 | | 2.4 | | 2.8 | 3.35 | 3.4 | 2.5 | 2.4 |
| 30. | 2.15 | 2.1 | 2.2 | 2.25 | | 2.4 | | 2.9 | 4.0 | 3.4 | 2.5 | 2.4 |
| 31. | 2.15 | | 2.2 | 2.2 | | 2.4 | | 3.0 | | 3.45 | 2.5 | |
| 1907-8. | | | | | | | | | | | | |
| 1. | 2.35 | 2.35 | 2.3 | 2.2 | 2.2 | 2.2 | 2.15 | 2.3 | 2.4 | 2.4 | 2.5 | 2.2 |
| 2. | 2.35 | 2.35 | 2.3 | 2.2 | 2.2 | 2.2 | 2.15 | 2.4 | 2.4 | 2.4 | 2.5 | |
| 3. | 2.35 | 2.35 | 2.25 | 2.2 | 2.2 | 2.15 | 2.15 | 2.6 | 2.4 | | 2.6 | 2.2 |
| 4. | 2.35 | 2.3 | 2.25 | 2.2 | 2.2 | 2.15 | 2.15 | 2.5 | 2.5 | 2.5 | 2.5 | |
| 5. | 2.35 | 2.3 | 2.2 | 2.15 | 2.15 | 2.15 | 2.15 | 2.3 | 2.4 | 2.6 | 2.5 | 2.2 |
| 6. | 2.35 | 2.3 | 2.3 | 2.15 | 2.15 | 2.1 | 2.15 | 2.5 | 2.6 | 2.4 | 2.5 | 2.2 |
| 7. | 2.4 | 2.3 | 2.4 | 2.15 | 2.1 | 2.1 | 2.15 | 2.4 | 2.65 | 2.4 | 2.6 | |
| 8. | 2.4 | 2.3 | 2.4 | 2.15 | 2.1 | 2.1 | 2.1 | 2.4 | 2.7 | 2.45 | 2.6 | 2.2 |
| 9. | 2.4 | 2.3 | 2.35 | 2.15 | 2.1 | 2.1 | 2.1 | 2.4 | 2.6 | 2.4 | 2.4 | 2.2 |
| 10. | 2.4 | 2.3 | 2.3 | 2.15 | 2.1 | 2.1 | 2.1 | 2.3 | 2.4 | 2.5 | 2.35 | |
| 11. | 2.4 | 2.3 | 2.35 | 2.2 | 2.1 | 2.2 | 2.1 | 2.3 | 2.4 | 2.5 | 2.3 | 2.3 |
| 12. | 2.4 | 2.3 | 2.4 | 2.2 | 2.1 | 2.3 | | 2.3 | 2.5 | 2.6 | 2.3 | 2.3 |
| 13. | 2.4 | 2.3 | 2.4 | 2.15 | 2.1 | 2.7 | | 2.3 | 2.5 | 2.5 | 2.35 | 2.2 |
| 14. | 2.4 | 2.3 | 2.4 | 2.15 | 2.1 | 2.75 | 2.2 | 2.4 | 2.5 | 2.6 | 2.3 | |
| 15. | 2.4 | 2.3 | 2.35 | 2.1 | 2.1 | 2.8 | 2.3 | 2.3 | | 2.5 | 2.35 | 2.2 |
| 16. | 2.4 | 2.3 | 2.3 | 2.1 | 2.1 | 2.9 | | 2.3 | | 2.5 | 2.4 | 2.15 |
| 17. | 2.4 | 2.3 | 2.25 | 2.1 | 2.1 | 2.75 | 2.3 | 2.4 | 2.6 | 2.4 | 2.3 | 2.1 |
| 18. | 2.4 | 2.3 | 2.2 | 2.1 | 2.15 | 2.7 | 2.3 | 2.3 | 2.6 | 2.4 | 2.2 | 2.25 |
| 19. | 2.4 | 2.3 | 2.15 | 2.15 | 2.15 | 2.7 | 2.4 | 2.3 | 2.4 | 2.4 | 2.3 | 2.2 |
| 20. | 2.4 | 2.25 | 2.15 | 2.15 | 2.2 | 2.7 | 2.6 | 2.3 | 2.35 | 2.3 | 2.25 | |
| 21. | 2.45 | 2.25 | 2.15 | 2.15 | 2.2 | 2.6 | 2.3 | 2.3 | 2.5 | 2.3 | 2.2 | 2.25 |
| 22. | 2.5 | 2.25 | 2.15 | 2.2 | 2.2 | 2.5 | 2.3 | 2.4 | 2.55 | 2.4 | 2.2 | |
| 23. | 2.56 | 2.25 | 2.15 | 2.2 | 2.2 | 2.4 | 2.3 | 2.5 | 2.4 | 2.3 | 2.2 | |
| 24. | 2.5 | 2.25 | 2.15 | 2.25 | 2.2 | 2.3 | 2.3 | 2.4 | 2.45 | 2.3 | 2.2 | 2.0 |
| 25. | 2.5 | 2.25 | 2.15 | 2.3 | 2.2 | 2.2 | 2.3 | 2.4 | 2.6 | 2.3 | | 2.0 |
| 26. | 2.5 | 2.25 | 2.15 | 2.3 | 2.2 | 2.2 | 2.2 | 2.5 | 2.65 | 2.4 | | |
| 27. | 2.5 | 2.3 | 2.2 | 2.25 | 2.25 | 2.2 | 2.4 | 2.5 | 2.6 | | 2.2 | 2.0 |
| 28. | 2.5 | 2.3 | 2.3 | 2.25 | 2.25 | 2.15 | 2.4 | 2.4 | 2.5 | 2.4 | 2.2 | |
| 29. | 2.5 | 2.3 | 2.25 | 2.2 | 2.25 | 2.15 | 2.3 | 2.3 | 2.5 | 2.5 | 2.2 | 2.0 |
| 30. | 2.45 | 2.3 | 2.2 | 2.2 | | 2.15 | 2.4 | 2.4 | 2.55 | 2.4 | 2.2 | |
| 31. | 2.4 | | 2.2 | 2.2 | | 2.15 | | 2.4 | | 2.5 | 2.2 | |
| 1908-9. | | | | | | | | | | | | |
| 1. | 2.0 | | | | 1.7 | 1.7 | 2.6 | 2.3 | | 3.5 | 2.6 | 2.3 |
| 2. | 2.1 | 2.0 | 1.95 | 1.9 | | | | | 2.9 | 3.6 | 2.5 | |
| 3. | | | | | 1.7 | 1.85 | 3.0 | 2.35 | 3.2 | 3.8 | 2.5 | 2.2 |
| 4. | 2.1 | 2.0 | 2.0 | 1.95 | | | | | | | 2.5 | |
| 5. | | | | | 1.9 | 1.9 | 2.6 | 2.4 | 3.3 | 3.7 | 2.4 | 2.2 |
| 6. | 2.1 | 1.95 | 2.0 | 2.2 | | | | | | 3.4 | 2.4 | |
| 7. | | | | | 1.95 | 1.95 | 2.5 | 2.4 | 3.4 | 3.3 | | 2.15 |
| 8. | 1.95 | 1.95 | 2.0 | 1.95 | | | 2.5 | 2.5 | 3.4 | | 2.4 | |
| 9. | 1.95 | | | | 2.0 | 2.0 | 2.5 | | 3.35 | 3.2 | 2.4 | 2.1 |
| 10. | 2.0 | 1.95 | 1.95 | 1.9 | | | | 2.5 | 3.15 | | | |
| 11. | 2.0 | | | | | 2.1 | 2.7 | | 3.2 | 3.1 | 2.35 | 2.0 |
| 12. | | 1.95 | 1.95 | 1.95 | 2.3 | | | 2.5 | | | | |
| 13. | 2.0 | | | | | 2.0 | 2.9 | | 3.2 | 3.0 | 2.4 | 2.1 |
| 14. | | 2.0 | 1.9 | 2.6 | 2.25 | | | 2.5 | | | 2.4 | |
| 15. | 2.0 | | | | | 2.1 | 2.9 | | 3.2 | 3.0 | | 2.0 |
| 16. | | 1.95 | 1.95 | 2.3 | 2.1 | | | 2.5 | | 3.0 | 2.4 | |
| 17. | 2.0 | | | | | 2.0 | 2.9 | | 3.2 | | 2.5 | 2.1 |
| 18. | | 1.95 | 1.9 | 2.3 | 2.0 | 2.1 | | 2.5 | 3.25 | 2.9 | | 2.1 |
| 19. | 2.0 | | | | | 1.9 | 2.8 | 2.4 | | 2.9 | 2.5 | 2.15 |
| 20. | | 1.95 | 1.9 | 2.3 | 1.9 | | 2.7 | 2.55 | 3.3 | | 2.55 | 2.1 |
| 21. | 2.0 | | | | | 1.8 | | | 3.4 | 2.8 | 2.6 | 2.2 |
| 22. | | 1.95 | 1.95 | 2.35 | 1.9 | | 2.6 | 2.5 | | 2.85 | | 2.1 |
| 23. | 2.0 | | | | | 1.7 | | | 3.4 | 2.8 | 2.5 | |
| 24. | | 1.95 | 1.95 | 2.4 | 1.8 | | 2.5 | 2.5 | 3.4 | | 2.45 | 2.15 |
| 25. | 1.95 | | | | | 2.0 | | | | 2.7 | | |
| 26. | | 1.95 | 1.95 | 2.35 | 1.95 | | 2.35 | 2.45 | 3.5 | | 2.4 | 2.1 |
| 27. | 2.0 | | | | | 2.0 | | 2.5 | 3.6 | 2.7 | 2.35 | |
| 28. | | 1.95 | 1.95 | 2.4 | 2.0 | | 2.3 | | | | 2.3 | 2.2 |
| 29. | 1.95 | | | | | 2.0 | 2.3 | 2.7 | 3.5 | 2.6 | | |
| 30. | | 1.95 | 1.95 | 2.4 | | | | | 3.5 | | 2.3 | 2.1 |
| 31. | 2.0 | | 1.95 | | | 2.0 | | 2.7 | | 2.6 | 2.25 | |

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1909–1911—Contd.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June. | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 1 | | | 2.3 | 2.6 | | 2.25 | 2.1 | 2.4 | 3.2 | 2.5 | | 2.0 |
| 2 | 2.1 | 2.1 | | | 2.1 | | | | | | 2.15 | |
| 3 | 2.0 | 2.0 | 2.2 | 2.5 | | 2.2 | 2.25 | 2.15 | 3.3 | 2.4 | | 2.15 |
| 4 | 2.0 | 2.0 | 2.25 | | 2.0 | 2.2 | | | 3.4 | | 2.1 | 2.1 |
| 5 | | | | 2.4 | 2.1 | | 2.1 | 2.4 | 3.2 | 2.45 | 2.1 | |
| 6 | 1.9 | 2.1 | 2.2 | | | 2.2 | 2.15 | | 3.25 | 2.4 | | 2.1 |
| 7 | 2.0 | | | 2.3 | 2.0 | 2.2 | | 2.6 | | | 2.2 | |
| 8 | | 2.0 | | | | 2.25 | 2.1 | 2.45 | 3.2 | 2.45 | | 2.0 |
| 9 | 1.9 | 2.25 | | 2.1 | 2.1 | | | | | | 2.1 | |
| 10 | 1.9 | | | | | 2.2 | 2.15 | 2.5 | 3.1 | 2.4 | | 2.05 |
| 11 | | 2.2 | | 2.0 | 2.0 | 2.25 | 2.2 | 2.55 | | | 2.1 | 2.0 |
| 12 | 1.95 | 2.2 | | | | | | | 3.15 | 2.4 | 2.1 | |
| 13 | 2.0 | | 2.3 | 2.0 | 2.1 | 2.2 | 2.15 | 2.5 | | | | 2.0 |
| 14 | | 2.1 | | | | | | | 3.2 | 2.4 | 2.2 | |
| 15 | 1.95 | | 2.4 | 2.0 | 2.1 | 2.2 | 2.2 | 2.6 | | | | 2.0 |
| 16 | | 2.2 | | | | | 2.1 | 2.6 | 3.1 | 2.65 | 2.15 | |
| 17 | 2.1 | | 2.3 | 2.0 | 2.1 | 2.2 | 2.2 | 2.6 | 3.7 | 2.4 | | 2.05 |
| 18 | | 2.15 | | | 2.1 | | | 2.6 | 3.3 | | 2.1 | |
| 19 | 2.0 | | 2.3 | 2.0 | | 2.2 | 2.15 | | 3.0 | 2.45 | | 2.0 |
| 20 | | 2.25 | | | 2.1 | | 2.2 | 2.7 | | | 2.0 | |
| 21 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | | | 2.9 | 2.4 | | 2.05 |
| 22 | | | | | | | 2.15 | 2.7 | 2.9 | | 2.1 | |
| 23 | 2.0 | 2.2 | 2.3 | 2.1 | 2.1 | 2.15 | | | 2.7 | 2.45 | | 2.0 |
| 24 | 2.1 | 2.15 | 2.3 | | | | 2.3 | 2.8 | 2.6 | | 2.0 | |
| 25 | | 2.2 | | 2.1 | 2.15 | 2.1 | 2.3 | | | 2.4 | | 2.05 |
| 26 | 2.0 | | 2.3 | | | | 2.4 | 2.6 | 2.55 | | 2.1 | |
| 27 | | 2.3 | | 2.1 | 2.1 | 2.1 | 2.35 | 2.85 | 2.5 | 2.5 | | 2.0 |
| 28 | 2.1 | | 2.3 | | 2.1 | | 2.4 | | | 2.6 | 2.0 | |
| 29 | | 2.15 | 2.3 | 2.1 | | 2.1 | | 2.9 | 2.5 | | | 1.9 |
| 30 | 2.0 | | | | | | 2.35 | | | 2.5 | 2.1 | 1.85 |
| 31 | 2.1 | | 2.3 | 2.0 | | 2.1 | | 3.0 | | 2.15 | | |
| **1910–11.** | | | | | | | | | | | | |
| 1 | 1.95 | 2.0 | 1.9 | 1.95 | 2.6 | 2.15 | 2.6 | 2.53 | 2.73 | | 3.4 | 2.5 |
| 2 | | | | | | | | | | 3.45 | | |
| 3 | 1.95 | 2.1 | 1.9 | 1.95 | 2.4 | 2.1 | 2.65 | 2.4 | 2.85 | 3.45 | 3.45 | 2.4 |
| 4 | | | 2.0 | | | | | | | | 3.42 | 2.4 |
| 5 | 2.0 | 2.0 | | 2.0 | 2.4 | 2.15 | 2.7 | 2.45 | 2.9 | 3.75 | 3.35 | |
| 6 | | 2.05 | 1.9 | | | | | | | 3.8 | | 2.35 |
| 7 | 2.0 | | | 1.95 | 2.35 | 2.2 | 2.6 | 2.4 | 2.85 | 3.8 | 3.4 | |
| 8 | | 2.0 | 1.95 | | | | | 2.4 | 2.9 | 3.83 | | 2.35 |
| 9 | 2.1 | | | | 2.25 | 2.6 | 2.5 | | | | 3.2 | |
| 10 | | 2.05 | 1.85 | 2.1 | | 2.2 | | 2.4 | 2.9 | 3.75 | | 2.3 |
| 11 | 2.05 | | 1.85 | | 2.2 | | 2.3 | 2.4 | 2.95 | | 3.23 | |
| 12 | | 2.0 | | 2.0 | | 2.2 | | | | 3.8 | | 2.35 |
| 13 | 2.1 | | 1.9 | | 2.2 | | 2.25 | 2.45 | 2.95 | 3.73 | 2.9 | |
| 14 | 2.1 | 2.05 | | 2.1 | | 2.23 | | 2.4 | 3.0 | | | 2.35 |
| 15 | | | 1.95 | 2.0 | 2.25 | | 2.3 | | | 4.0 | 3.0 | |
| 16 | 2.15 | 1.95 | | | | 2.15 | | 2.45 | 3.2 | 3.93 | | 2.35 |
| 17 | | 1.9 | 1.95 | 2.1 | 2.15 | 2.2 | 2.35 | 2.45 | 3.4 | | 2.85 | |
| 18 | 2.05 | | 2.0 | | | 2.15 | | | 3.7 | 3.95 | 2.9 | 2.35 |
| 19 | | 1.85 | | 2.05 | 2.2 | | 2.4 | 2.55 | 3.77 | | | |
| 20 | 2.1 | | 2.0 | | | 2.25 | | | | 3.65 | 2.75 | 2.3 |
| 21 | 2.0 | 1.9 | | 2.1 | 2.1 | | 2.45 | 2.5 | 3.95 | | | |
| 22 | | | 2.0 | 2.0 | | 2.3 | | 2.6 | | 3.7 | 2.8 | 2.3 |
| 23 | 2.0 | 1.8 | | | 2.1 | 2.4 | 2.5 | | 3.8 | | | |
| 24 | | | 1.95 | 2.1 | | 2.4 | | 2.7 | 3.8 | 3.55 | 2.7 | 2.3 |
| 25 | 2.05 | 1.85 | | 2.15 | 2.1 | | 2.55 | | | | | |
| 26 | 2.1 | | 2.0 | 2.0 | 2.15 | 2.5 | | 2.7 | 3.6 | 3.5 | 2.6 | 2.3 |
| 27 | 2.1 | | | 2.1 | | | 2.53 | | | | | |
| 28 | | 1.8 | 1.95 | | 2.1 | 2.5 | | 2.75 | 3.55 | 3.5 | 2.5 | 2.33 |
| 29 | 2.1 | 1.85 | 1.95 | | | | 2.55 | | | | 2.55 | |
| 30 | 2.0 | | | 2.6 | | 2.6 | 2.5 | 2.7 | 3.4 | 3.53 | | 2.3 |
| 31 | 2.1 | | 2.0 | | | 2.55 | | | | | 2.45 | |

All stations in Owens Valley except those on Owens River are near the western margin of the valley, and most of them are below the delta fans, which extend eastward from the mouths of the canyons and are above all diversions. Nearly all measurements are made from footbridges or by wading. The current is swift at almost every station, and the channel is subject to more or less change.

### OWENS LAKE NEAR OLANCHA, CAL.

This station was first established in March, 1908, near the old Smith ranch. The gage, which was a 2-inch by 6-inch pine board, was submerged in the early part of July, 1911, and a new gage set at the same location. During September, 1911, the gage was washed out and the station was moved to a point 1 mile north of Brier, where a gage was installed November 1, 1911. Gage heights represent elevation of water surface above sea level.

*Elevation of Owens Lake near Olancha, Cal., 1908–1911.*

| Date. | Elevation of water surface. | Date. | Elevation of water surface. |
|---|---|---|---|
| 1908. | *Feet.* | 1911. | *Feet.* |
| Mar. 4 | 3,575.95 | Jan. 5 | 3,575.29 |
| 29 | 3,575.73 | Feb. 8 | 3,576.11 |
| Apr. 19 | 3,575.78 | July 12 | 3,577.35 |
| 26 | 3,575.90 | 28 | 3,578.0[illegible] |
| May 28 | 3,575.60 | Nov. 1 | 3,577.32 |
| June 4 | 3,575.40 | 5 | 3,577.5[illegible] |
| | | Dec. 3 | 3,577.6[illegible] |
| 1910. | | | |
| July 22 | 3,575.98 | | |
| Sept. 21 | 3,574.95 | | |
| Oct. 28 | 3,574.71 | | |
| Dec. 1 | 3,574.89 | | |

### OWENS RIVER NEAR ROUND VALLEY, CAL.

This station, which is now located 600 feet above the junction o Owens River and Rock Creek, in sec. 10, T. 6 S., R. 31 E., was estab lished August 3, 1903, at a footbridge 100 feet above the present site to which it was removed May 27, 1907, as the original station ha been destroyed on March 19 of that year.

No important streams enter above and Rock Creek is the firs tributary below the station. No ditches take water above the gag but several divert from the main river and its tributaries below th station, the first one being the Owens River canal, which heads miles below the mouth of Rock Creek. The drainage area above th station is approximately 450 square miles.

The gage, which is a vertical staff on the left bank, was not referre to the datum of the original gage.

Discharge measurements are made from a car and cable at the gag The channel is composed of rock and lava bowlders and change little.

*Discharge measurements of Owens River near Round Valley, Cal., in 1903-1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* |
| Aug. 3 | R. S. Hawley | 1.80 | 161 |
| 9 | ....do | 1.85 | 160 |
| 18 | ....do | 1.75 | 159 |
| 22 | ....do | 1.75 | 160 |
| Sept. 1 | ....do | 1.74 | 159 |
| 12 | ....do | 1.80 | 175 |
| Oct. 8 | ....do | 1.85 | 185 |
| 25 | ....do | 1.82 | 173 |
| Nov. 24 | ....do | 1.88 | 196 |
| Dec. 29 | ....do | 1.70 | 151 |
| 1904. | | | |
| Jan. 25 | R. S. Hawley | 1.80 | 184 |
| Mar. 2 | ....do | 2.20 | 270 |
| 28 | ....do | 2.85 | 458 |
| Apr. 8 | Murphy, Bennett, and Hawley | 1.87 | 186 |
| 27 | R. S. Hawley | 1.82 | 190 |
| June 2 | ....do | 2.57 | 383 |
| 15 | ....do | 3.10 | 564 |
| July 13 | Clausen and Barnes | 2.55 | 380 |
| Aug. 3 | L. M. Barnes | 2.40 | 324 |
| Sept. 9 | R. S. Hawley | 2.01 | 232 |
| Oct. 13 | Hawley, Clapp, and Taylor | 2.25 | 269 |
| Nov. 12 | R. J. Taylor | 2.00 | 218 |
| Dec. 6 | ....do | 1.85 | 155 |
| 1905. | | | |
| Jan. 16 | R. J. Taylor | 1.97 | 184 |
| Feb. 9 | ....do | 1.95 | 175 |
| Apr. 4 | J. S. Evans | 2.00 | 179 |
| May 22 | ....do | 2.39 | 306 |
| June 27 | ....do | 2.58 | 382 |
| July 25 | ....do | 2.15 | 207 |
| Aug. 15 | ....do | 1.90 | 154 |
| Sept. 8 | ....do | 2.00 | 177 |
| 27 | ....do | 1.90 | 155 |
| Nov. 2 | F. R. S. Buttemer | 1.80 | 164 |
| 24 | ....do | 1.85 | 180 |
| Dec. 10 | ....do | 1.73 | 151 |
| 1906. | | | |
| Jan. 8 | F. R. S. Buttemer | 1.75 | 161 |
| 14 | ....do | 1.92 | 196 |
| 14 | ....do | 1.93 | 191 |
| Mar. 23 | Hawley and Shuey | 2.85 | 465 |
| Nov. 3 | G. R. Shuey | 2.14 | 261 |
| 30 | ....do | 2.00 | 214 |
| 1907. | | | |
| Jan. 25 | G. R. Shuey | 2.15 | 261 |
| Feb. 13 | ....do | 2.17 | 254 |
| Mar. 12 | ....do | 2.06 | 232 |
| May 14 | ....do | ........ | 350 |
| Aug. 4[a] | Shuey and Post | 3.25 | 709 |
| 6 | R. B. Post | 3.00 | 566 |
| 24 | ....do | 2.61 | 369 |
| Sept. 7 | ....do | 2.52 | 300 |
| 23 | ....do | 2.40 | 260 |
| Oct. 5 | ....do | 2.35 | 251 |
| 28 | ....do | 2.50 | 278 |
| Nov. 17 | ....do | 2.28 | 233 |
| Dec. 8 | ....do | 2.26 | 243 |
| 1908. | | *Feet.* | *Sec.-ft.* |
| Feb. 22 | R. B. Post | 2.20 | 228 |
| Mar. 29 | ....do | 2.15 | 236 |
| May 12 | ....do | 2.2 | 222 |
| June 18 | ....do | 2.35 | 256 |
| July 15 | W. A. Lamb | 2.38 | 267 |
| Aug. 4 | ....do | 2.45 | 311 |
| 25 | ....do | 2.15 | 240 |
| Sept. 17 | ....do | 2.1 | 220 |
| Oct. 8 | ....do | 1.95 | 198 |
| 23 | Barrows and Lamb | 2.00 | 200 |
| Nov. 7 | ....do | 2.00 | 187 |
| 1909. | | | |
| Jan. 22 | Haines and Lee | 2.34 | 284 |
| Feb. 11 | R. E. Haines | 2.14 | 211 |
| 27 | ....do | 2.02 | 187 |
| Mar. 18 | ....do | 2.10 | 218 |
| Apr. 8 | ....do | 2.48 | 282 |
| 29 | ....do | 2.20 | 224 |
| May 19 | ....do | 2.38 | 294 |
| June 10 | ....do | 3.15 | 574 |
| 30 | ....do | 3.48 | 710 |
| July 23 | ....do | 2.75 | 420 |
| Aug. 11 | ....do | 2.40 | 295 |
| Sept. 1 | ....do | 2.30 | 256 |
| 22 | ....do | 2.11 | 209 |
| Oct. 13 | ....do | 2.09 | 201 |
| Nov. 3 | ....do | 2.00 | 193 |
| 24 | ....do | 2.16 | 216 |
| 1910. | | | |
| Mar. 9 | R. E. Haines | 2.56 | 352 |
| 30 | ....do | 2.12 | 218 |
| Apr. 21 | ....do | 2.20 | 242 |
| May 11 | ....do | 2.40 | 300 |
| June 24 | C. H. Lee | 2.53 | 348 |
| July 11 | ....do | 2.43 | 312 |
| Aug. 2 | ....do | 2.32 | 288 |
| 24 | F. G. Wood | 2.07 | 201 |
| Sept. 17 | G. T. Peekema | 2.02 | 175 |
| Oct. 22 | ....do | 2.02 | 183 |
| Nov. 18 | ....do | 2.03 | 189 |
| Dec. 21 | ....do | 1.98 | 164 |
| 1911. | | | |
| Jan. 25 | G. T. Peekema | 2.15 | 206 |
| Mar. 12 | C. H. Lee | 2.20 | 220 |
| May 5 | ....do | 2.45 | 288 |
| June 26 | ....do | 3.40 | 757 |
| July 7 | ....do | 3.82 | 919 |
| Aug. 3 | J. E. Jones | 2.92 | 466 |
| 24 | ....do | 2.50 | 342 |
| Sept. 20 | ....do | 2.30 | 232 |
| Oct. 24 | ....do | 2.25 | 250 |
| Nov. 22 | ....do | 2.18 | 223 |
| Dec. 13 | ....do | 2.10 | 201 |
| 1912. | | | |
| Jan. 17 | J. E. Jones | 2.15 | 218 |
| Feb. 21 | ....do | 2.10 | 199 |
| Mar. 20 | ....do | 2.12 | 212 |
| Apr. 16 | ....do | 2.20 | 227 |
| May 9 | ....do | 2.08 | 192 |
| 22 | ....do | 2.12 | 225 |
| June 12 | ....do | 2.46 | 307 |

[a] Beginning Aug. 4, 1907, the gage heights refer to the new gage established May 29, 1907.

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1903–1912.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | ...... | 1.75 | 11 | 1.8 | 1.8 | 21 | 1.68 | 1.8 |
| 2 | ...... | 1.75 | 12 | 1.9 | 1.8 | 22 | 1.72 | 1.8 |
| 3 | ...... | 1.75 | 13 | 1.9 | 1.8 | 23 | 1.8 | 1.8 |
| 4 | 1.8 | 1.73 | 14 | 1.9 | 1.8 | 24 | 1.75 | 1.78 |
| 5 | 1.8 | 1.7 | 15 | 1.8 | 1.8 | 25 | 1.8 | 1.77 |
| 6 | 1.8 | 1.72 | 16 | 1.8 | 1.8 | 26 | 1.8 | 1.8 |
| 7 | 1.8 | 1.73 | 17 | 1.8 | 1.7 | 27 | 1.78 | 1.8 |
| 8 | 1.8 | 1.75 | 18 | 1.75 | 1.8 | 28 | 1.72 | 1.8 |
| 9 | 1.85 | 1.77 | 19 | 1.75 | 1.8 | 29 | 1.7 | 1.8 |
| 10 | 1.8 | 1.8 | 20 | 1.75 | 1.8 | 30 | 1.7 | 1.78 |
| | | | | | | 31 | 1.7 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | | |
| 1 | 1.77 | 1.8 | 1.8 | 1.7 | 1.85 | 2.2 | 2.0 | 1.8 | 2.6 | 3.0 | 2.7 | 2.3 |
| 2 | 1.8 | 1.8 | 1.8 | 1.7 | 1.85 | 2.2 | 2.0 | 1.8 | 2.6 | 2.9 | 2.6 | 2.25 |
| 3 | 1.8 | 1.8 | 1.8 | 1.7 | 1.8 | 2.2 | 2.0 | 1.8 | 2.8 | 3.0 | 2.5 | 2.2 |
| 4 | 1.83 | 1.8 | 1.7 | 1.7 | 1.85 | 2.2 | 1.9 | 1.8 | 2.9 | 3.0 | 2.5 | 2.1 |
| 5 | 1.8 | 1.8 | 1.7 | 1.7 | 1.85 | 2.2 | 1.9 | 1.85 | 2.9 | 3.0 | 2.45 | 2.1 |
| 6 | 1.8 | 1.75 | 1.7 | 1.7 | 1.8 | 2.2 | 1.9 | 1.9 | 3.0 | 3.0 | 2.4 | 2.1 |
| 7 | 1.8 | 1.7 | 1.7 | 1.7 | 1.8 | 2.1 | 1.9 | 1.95 | 3.0 | 2.9 | 2.5 | 2.2 |
| 8 | 1.82 | 1.7 | 1.7 | 1.7 | 1.8 | 2.1 | 1.9 | 2.0 | 2.9 | 2.9 | 2.6 | 2.2 |
| 9 | 1.8 | 1.7 | 1.7 | 1.7 | 1.85 | 1.9 | 1.9 | 2.0 | 2.9 | 2.9 | 2.7 | 2.15 |
| 10 | 1.83 | 1.7 | 1.7 | 1.7 | 1.85 | 2.0 | 1.9 | 2.1 | 3.0 | 2.9 | 2.7 | 2.15 |
| 11 | 1.8 | 1.7 | 1.7 | 1.7 | 1.9 | 2.0 | 1.9 | 2.1 | 3.0 | 2.85 | 2.6 | 2.15 |
| 12 | 1.8 | 1.7 | 1.7 | 1.7 | 1.9 | 1.9 | 1.9 | 2.2 | 3.0 | 2.85 | 2.6 | 2.1 |
| 13 | 1.8 | 1.7 | 1.7 | 1.7 | 1.9 | 1.9 | 2.0 | 2.2 | 3.0 | 2.9 | 2.6 | 2.0 |
| 14 | 1.82 | 1.7 | 1.7 | 1.7 | 2.0 | 1.9 | 2.1 | 2.3 | 3.0 | 2.8 | 2.6 | 2.0 |
| 15 | 1.8 | 1.7 | 1.7 | 1.7 | 1.95 | 2.2 | 2.0 | 2.4 | 3.1 | 2.6 | 2.45 | 2.1 |
| 16 | 1.8 | 1.7 | 1.8 | 1.7 | 2.5 | 2.2 | 2.0 | 2.5 | 3.4 | 2.6 | 2.55 | 2.1 |
| 17 | 1.8 | 1.7 | 1.8 | 1.7 | 2.25 | 2.2 | 1.9 | 2.5 | 3.4 | 2.55 | 2.5 | 2.1 |
| 18 | 1.8 | 1.7 | 1.8 | 1.7 | 1.95 | 2.2 | 1.9 | 2.5 | 3.3 | 2.55 | 2.45 | 2.1 |
| 19 | 1.8 | 1.7 | 1.8 | 1.7 | 1.9 | 2.2 | 2.0 | 2.5 | 3.3 | 2.5 | 2.4 | 2.0 |
| 20 | 1.8 | 1.7 | 1.8 | 1.7 | 2.0 | 2.2 | 1.9 | 2.4 | 3.4 | 2.5 | 2.25 | 2.0 |
| 21 | 1.8 | 1.7 | 1.8 | 1.7 | 1.95 | 2.2 | 1.9 | 2.4 | 3.3 | 2.5 | 2.3 | 2.0 |
| 22 | 1.8 | 1.7 | 1.8 | 1.7 | 2.0 | 2.2 | 1.9 | 2.4 | 3.3 | 2.65 | 2.25 | 2.0 |
| 23 | 1.8 | 1.8 | 1.8 | 1.7 | 2.3 | 2.2 | 1.9 | 2.4 | 3.2 | 2.7 | 2.25 | 2.1 |
| 24 | 1.8 | 1.9 | 1.8 | 1.75 | 2.3 | 2.1 | 1.85 | 2.5 | 3.3 | 2.6 | 2.3 | 2.9 |
| 25 | 1.8 | 1.9 | 1.8 | 1.8 | 2.3 | 2.1 | 1.85 | 2.7 | 3.2 | 2.55 | 2.3 | 2.95 |
| 26 | 1.8 | 1.8 | 1.8 | 1.8 | 2.3 | 2.1 | 1.9 | 2.8 | 3.1 | 2.55 | 2.3 | 2.6 |
| 27 | 1.8 | 1.8 | 1.7 | 1.7 | 2.2 | 2.1 | 1.9 | 2.8 | 3.2 | 2.7 | 2.3 | 2.55 |
| 28 | 1.8 | 1.8 | 1.7 | 1.8 | 2.0 | 2.85 | 1.9 | 2.8 | 3.2 | 2.7 | 2.3 | 2.45 |
| 29 | 1.8 | 1.8 | 1.7 | 1.8 | 2.0 | 2.6 | 1.85 | 2.6 | 3.1 | 2.65 | 2.3 | 2.4 |
| 30 | 1.8 | 1.8 | 1.7 | 1.8 | ...... | 2.0 | 1.8 | 2.6 | 3.1 | 2.7 | 2.3 | 2.4 |
| 31 | 1.7 | ...... | 1.7 | 1.85 | ...... | 1.96 | ...... | 2.55 | ...... | 2.8 | 2.25 | ...... |
| 1904–5. | | | | | | | | | | | | |
| 1 | 2.3 | 2.15 | 2.1 | 2.15 | 2.2 | 2.2 | 1.9 | 2.1 | 2.3 | 2.5 | 2.1 | 1.9 |
| 2 | 2.3 | 2.15 | 2.1 | 2.1 | 2.15 | 2.25 | 1.95 | 2.1 | 2.3 | 2.5 | 2.05 | 1.9 |
| 3 | 2.2 | 2.15 | 2.1 | 2.1 | 2.1 | 2.2 | 2.0 | 2.1 | 2.3 | 2.6 | 2.05 | 1.9 |
| 4 | 2.2 | 2.2 | 2.1 | 2.0 | 2.1 | 2.2 | 2.0 | 2.1 | 2.3 | 2.6 | 2.0 | 1.9 |
| 5 | 2.15 | 2.3 | 2.1 | 2.0 | 2.1 | 2.2 | 2.0 | 2.1 | 2.3 | 2.6 | 2.0 | 1.95 |
| 6 | 2.10 | 2.2 | 2.1 | 2.0 | 2.0 | 2.25 | 2.0 | 2.05 | 2.3 | 2.6 | 1.95 | 2.0 |
| 7 | 2.15 | 2.1 | 2.0 | 2.0 | 2.1 | 2.25 | 2.0 | 2.0 | 2.35 | 2.5 | 1.95 | 2.0 |
| 8 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.0 | 2.0 | 2.35 | 2.5 | 2.0 | 2.0 |
| 9 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.4 | 2.5 | 2.0 | 2.0 |
| 10 | 2.25 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.4 | 2.5 | 2.0 | 2.0 |
| 11 | 2.3 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.4 | 2.5 | 1.9 | 2.0 |
| 12 | 2.3 | 2.1 | 2.0 | 1.95 | 2.0 | 2.0 | 2.0 | 2.0 | 2.55 | 2.45 | 1.9 | 2.0 |
| 13 | 2.25 | 2.1 | 2.0 | 1.95 | 2.0 | 2.5 | 2.0 | 2.0 | 2.7 | 2.4 | 1.9 | 2.0 |
| 14 | 2.25 | 2.1 | 2.0 | 1.9 | 2.0 | 2.15 | 1.95 | 2.0 | 2.75 | 2.4 | 2.0 | 2.0 |
| 15 | 2.2 | 2.1 | 2.05 | 1.9 | 2.0 | 2.15 | 1.9 | 2.0 | 2.75 | 2.4 | 2.0 | 2.0 |
| 16 | 2.2 | 2.1 | 2.05 | 1.9 | 2.0 | 2.15 | 1.9 | 2.0 | 2.73 | 2.3 | 2.0 | 2.0 |
| 17 | 2.1 | 2.1 | 2.05 | 1.95 | 2.0 | 2.1 | 1.95 | 2.2 | 3.0 | 2.2 | 1.9 | 2.0 |
| 18 | 2.0 | 2.1 | 2.05 | 1.95 | 2.1 | 2.1 | 1.95 | 2.35 | 3.0 | 2.2 | 1.9 | 2.0 |
| 19 | 2.15 | 2.1 | 2.0 | 2.0 | 2.2 | 2.05 | 1.95 | 2.35 | 3.0 | 2.2 | 1.9 | 2.0 |
| 20 | 2.15 | 2.1 | 2.0 | 2.0 | 2.1 | 2.05 | 1.95 | 2.4 | 3.0 | 2.2 | 1.85 | 2.0 |

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1903-1912* – Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 21 | 2.2 | 2.1 | 1.95 | 2.1 | 2.0 | 2.1 | 1.9 | 2.4 | 3.0 | 2.15 | 1.85 | 2.0 |
| 22 | 2.15 | 2.1 | 1.9 | 2.1 | 1.95 | 2.1 | 1.9 | 2.4 | 3.0 | 2.1 | 1.9 | 2.0 |
| 23 | 2.15 | 2.1 | 1.85 | 2.0 | 1.95 | 2.1 | 1.9 | 2.4 | 3.0 | 2.1 | 1.9 | 2.0 |
| 24 | 2.15 | 2.1 | 1.8 | 2.0 | 1.9 | 2.0 | 1.95 | 2.4 | 2.95 | 2.1 | 1.9 | 2.0 |
| 25 | 2.15 | 2.0 | 1.8 | 2.1 | 1.85 | 2.0 | 1.95 | 2.4 | 2.8 | 2.1 | 1.9 | 2.0 |
| 26 | 2.15 | 2.0 | 1.8 | 2.1 | 1.85 | 2.0 | 1.95 | 2.4 | 2.7 | 2.0 | 1.9 | 2.0 |
| 27 | 2.15 | 2.0 | 1.9 | 2.1 | 2.0 | 2.0 | 1.95 | 2.45 | 2.6 | 2.0 | 1.9 | 2.0 |
| 28 | 2.15 | 2.0 | 1.95 | 2.1 | 2.1 | 1.95 | 2.0 | 2.55 | 2.6 | 2.0 | 1.9 | 2.0 |
| 29 | 2.1 | 2.0 | 1.9 | 2.1 | ...... | 1.9 | 2.05 | 2.5 | 2.55 | 2.0 | 1.9 | 2.0 |
| 30 | 2.1 | 2.0 | 2.0 | 2.2 | ...... | 1.9 | 2.05 | 2.4 | 2.5 | 2.0 | 1.9 | 2.0 |
| 31 | 2.1 | ...... | 2.0 | 2.2 | ...... | 1.9 | ...... | 2.3 | ...... | 2.0 | 1.9 | ...... |
| 1905–6. | | | | | | | | | | | | |
| 1 | 2.0 | 1.8 | 1.9 | 1.8 | 1.85 | 1.95 | 2.45 | 2.25 | 2.4 | 3.5 | 3.5 | 2.6 |
| 2 | 2.0 | 1.8 | 1.9 | 1.8 | 1.9 | 1.95 | 2.4 | 2.3 | 2.45 | 3.55 | 3.5 | 2.6 |
| 3 | 2.0 | 1.75 | 1.95 | 1.8 | 1.9 | 1.95 | 2.4 | 2.35 | 2.4 | 3.5 | 3.45 | 2.6 |
| 4 | 1.95 | 1.75 | 1.95 | 1.8 | 1.9 | 1.95 | 2.4 | 2.3 | 2.45 | 3.45 | 3.45 | 2.6 |
| 5 | 1.95 | 1.8 | 1.95 | 1.8 | 1.9 | 1.95 | 2.25 | 2.3 | 2.5 | (a) | 3.4 | 2.6 |
| 6 | 1.9 | 1.8 | 2.0 | 1.8 | 1.9 | 1.95 | 2.1 | 2.25 | 2.6 | ...... | 3.3 | 2.55 |
| 7 | 1.9 | 1.85 | 2.0 | 1.75 | 1.9 | 2.0 | 2.15 | 2.2 | 2.7 | ...... | 3.3 | 2.5 |
| 8 | 1.9 | 1.85 | 2.0 | 1.75 | 1.9 | 2.0 | 2.3 | 2.25 | 2.9 | ...... | 3.3 | 2.5 |
| 9 | 1.9 | 1.9 | 1.95 | 1.75 | 1.95 | 2.0 | 2.5 | 2.2 | 3.9 | ...... | 3.25 | 2.45 |
| 10 | 1.95 | 1.9 | 1.9 | 1.75 | 1.95 | 2.0 | 2.6 | 2.25 | 3.95 | ...... | 3.25 | 2.45 |
| 11 | 1.95 | 1.9 | 1.9 | 1.8 | 1.95 | 2.1 | 2.7 | 2.35 | 3.0 | ...... | 3.2 | 2.45 |
| 12 | 2.0 | 1.9 | 1.9 | 1.8 | 1.95 | 2.3 | 2.7 | 2.5 | 3.25 | ...... | 3.1 | 2.45 |
| 13 | 2.0 | 1.9 | 1.9 | 1.9 | 1.95 | 2.25 | 2.75 | 2.45 | 3.3 | ...... | 3.1 | 2.45 |
| 14 | 2.0 | 1.95 | 1.85 | 1.9 | 1.95 | 2.2 | 2.7 | 2.4 | 3.4 | ...... | 3.1 | 2.4 |
| 15 | 2.0 | 2.0 | 1.85 | 1.9 | 1.95 | 2.2 | 2.65 | 2.4 | 3.4 | ...... | 3.05 | 2.4 |
| 16 | 2.0 | 2.0 | 1.85 | 1.9 | 1.95 | 2.25 | 2.7 | 2.4 | 3.45 | ...... | 3.0 | 2.4 |
| 17 | 1.95 | 2.0 | 1.8 | 1.95 | 1.95 | 2.25 | 2.7 | 2.4 | 3.45 | ...... | 2.95 | 2.4 |
| 18 | 1.95 | 2.0 | 1.8 | 2.15 | 1.95 | 2.25 | 2.7 | 2.45 | 3.5 | ...... | 2.95 | 2.4 |
| 19 | 1.9 | 2.0 | 1.8 | 2.1 | 1.95 | 2.3 | 2.7 | 2.6 | 3.55 | ...... | 3.1 | 2.35 |
| 20 | 1.85 | 2.0 | 1.75 | 2.0 | 1.95 | 2.3 | 2.7 | 2.65 | 3.6 | ...... | 3.2 | 2.35 |
| 21 | 1.85 | 2.0 | 1.75 | 2.0 | 2.0 | 2.35 | 2.6 | 2.6 | 3.7 | ...... | 3.2 | 2.3 |
| 22 | 1.85 | 2.0 | 1.75 | 2.1 | 2.0 | 2.35 | 2.6 | 2.55 | 3.75 | ...... | 3.1 | 2.3 |
| 23 | 1.85 | 2.0 | 1.75 | 2.1 | 2.0 | 2.35 | 2.5 | 2.5 | 3.85 | ...... | 2.85 | 2.25 |
| 24 | 1.85 | 2.0 | 1.75 | 2.1 | 2.0 | 2.4 | 2.35 | 2.5 | 3.9 | ...... | 2.85 | 2.25 |
| 25 | 1.8 | 2.0 | 1.75 | 2.1 | 2.0 | 2.35 | 2.25 | 2.5 | 3.9 | ...... | 2.85 | 2.25 |
| 26 | 1.8 | 2.0 | 1.8 | 2.05 | 2.0 | 2.4 | 2.2 | 2.5 | 3.9 | ...... | 2.7 | 2.3 |
| 27 | 1.75 | 2.0 | 1.8 | 2.0 | 1.95 | 2.35 | 2.15 | 2.5 | 3.7 | ...... | 2.6 | 2.3 |
| 28 | 1.75 | 1.95 | 1.8 | 2.0 | 1.95 | 2.3 | 2.15 | 2.45 | 3.65 | ...... | 2.6 | 2.3 |
| 29 | 1.75 | 1.9 | 1.8 | 1.95 | ...... | 2.3 | 2.2 | 2.4 | 3.5 | 3.65 | 2.6 | 2.3 |
| 30 | 1.75 | 1.9 | 1.8 | 1.9 | ...... | 2.35 | 2.2 | 2.45 | 3.6 | 3.6 | 2.6 | 2.3 |
| 31 | 1.75 | ...... | 1.8 | 1.9 | ...... | 2.5 | ...... | 2.4 | ...... | 3.6 | 2.6 | ...... |
| 1906–7. | | | | | | | | | | | | |
| 1 | 2.3 | 2.15 | 2.0 | 2.15 | 2.2 | 2.25 | ...... | ...... | 3.0 | 3.6 | 3.45 | 2.5 |
| 2 | 2.3 | 2.15 | 2.0 | 2.1 | 2.2 | 2.3 | ...... | ...... | 3.2 | 3.6 | 3.45 | 2.5 |
| 3 | 2.3 | 2.15 | 2.05 | 2.0 | 2.25 | 2.3 | ...... | ...... | 3.4 | 3.6 | 3.45 | 2.5 |
| 4 | 2.35 | 2.15 | 2.1 | 1.95 | 2.3 | 2.35 | ...... | ...... | 3.4 | 3.6 | 3.4 | 2.5 |
| 5 | 2.35 | 2.15 | 2.1 | 1.85 | 2.3 | 2.4 | ...... | ...... | 3.35 | 3.6 | 3.3 | 2.5 |
| 6 | 2.35 | 2.15 | 2.1 | 1.9 | 2.35 | 2.4 | ...... | ...... | 3.2 | 3.6 | 3.2 | 2.5 |
| 7 | 2.3 | 2.15 | 2.1 | 1.9 | 2.35 | 2.35 | ...... | ...... | 3.1 | 3.6 | 3.2 | 2.5 |
| 8 | 2.3 | 2.1 | 2.1 | 1.95 | 2.3 | 2.3 | ...... | ...... | 3.1 | 3.6 | 3.1 | 2.5 |
| 9 | 2.3 | 2.1 | 2.15 | 2.0 | 2.2 | 2.25 | ...... | ...... | 3.05 | 3.6 | 3.0 | 2.5 |
| 10 | 2.3 | 2.1 | 2.15 | 2.1 | 2.2 | 2.25 | ...... | ...... | 3.0 | 3.6 | 2.9 | 2.5 |
| 11 | 2.25 | 2.1 | 2.2 | 2.15 | 2.2 | 2.2 | ...... | ...... | 3.0 | 3.6 | 2.9 | 2.5 |
| 12 | 2.2 | 2.1 | 2.2 | 2.15 | 2.2 | 2.05 | ...... | ...... | 3.0 | 3.6 | 2.9 | 2.55 |
| 13 | 2.2 | 2.1 | 2.2 | 2.15 | 2.2 | 2.25 | ...... | ...... | 2.9 | 3.6 | 2.85 | 2.55 |
| 14 | 2.2 | 2.1 | 2.2 | 2.15 | 2.2 | 2.3 | ...... | ...... | 2.8 | 3.55 | 2.85 | 2.55 |
| 15 | 2.2 | 2.05 | 2.2 | 2.15 | 2.2 | 2.3 | ...... | ...... | 2.8 | 3.5 | 2.85 | 2.5 |
| 16 | 2.2 | 2.05 | 2.2 | 2.15 | 2.3 | 2.25 | ...... | ...... | 2.8 | 3.45 | 2.85 | 2.5 |
| 17 | 2.2 | 2.0 | 2.2 | 2.15 | 2.25 | 2.5 | ...... | ...... | 3.0 | 3.4 | 2.8 | 2.55 |
| 18 | 2.2 | 2.0 | 2.2 | 2.15 | 2.2 | 4.2 | ...... | ...... | 3.1 | 3.4 | 2.8 | 2.55 |
| 19 | 2.2 | 2.0 | 2.15 | 2.15 | 2.2 | 3.0 | ...... | ...... | 2.8 | 3.4 | 2.75 | 2.6 |
| 20 | 2.15 | 2.0 | 2.15 | 2.15 | 2.25 | 2.5 | ...... | ...... | 2.7 | 3.4 | 2.75 | 2.6 |
| 21 | 2.15 | 2.0 | 2.1 | 2.2 | 2.25 | 2.7 | ...... | ...... | 3.0 | 3.4 | 2.7 | 2.55 |
| 22 | 2.15 | 2.0 | 2.1 | 2.2 | 2.3 | 2.5 | ...... | ...... | 3.0 | 3.35 | 2.7 | 2.5 |
| 23 | 2.1 | 2.0 | 2.15 | 2 2 | 2.35 | 2.5 | ...... | ...... | 3.1 | 3.3 | 2.65 | 2.4 |
| 24 | 2.1 | 2.0 | 2.15 | 2.15 | 2.25 | 2.4 | ...... | ...... | 3.0 | 3.25 | 2.6 | 2.4 |
| 25 | 2.1 | 2.05 | 2.15 | 2.15 | 2.2 | 2.4 | ...... | ...... | 3.0 | 3.3 | 2.6 | 2.4 |

[a] Station discontinued; operations resumed July 29.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | | | | 2.3 |
| [illegible] | | | | | | | | | | | | 2.2 |
| [illegible] | | | | | | | | | | | 2.4 | 2.2 |
| [illegible] | | | | | | | | | | | 2.4 | |
| [illegible] | | | | | | | | | | | | 2.15 |
| [illegible] | | | | | | | | | | | 2.4 | |
| [illegible] | | | | | | | | | | | 2.4 | 2.1 |
| [illegible] | [illegible] | | | | | [illegible] | [illegible] | | [illegible] | [illegible] | 2.35 | 2.0 |
| [illegible] | [illegible] | | | | | [illegible] | [illegible] | | [illegible] | 3.0 | 2.4 | 2.1 |
| [illegible] | | [illegible] | [illegible] | [illegible] | 2.25 | | | [illegible] | | | 2.4 | |
| [illegible] | [illegible] | | | | | [illegible] | [illegible] | | [illegible] | 3.0 | | 2.0 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | | 3.0 | 2.4 | |
| [illegible] | [illegible] | | | | | [illegible] | [illegible] | | [illegible] | | 2.5 | 2.1 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | 2.9 | | 2.1 |
| [illegible] | [illegible] | | | | | [illegible] | [illegible] | [illegible] | | 2.9 | 2.5 | 2.15 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | 2.55 | 2.1 |
| [illegible] | [illegible] | | | | | 1.9 | | | 3.4 | 2.8 | 2.6 | 2.2 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | | 2.85 | | 2.1 |
| [illegible] | [illegible] | | | | | 1.7 | | | 3.4 | 2.8 | 2.5 | |
| [illegible] | | [illegible] | [illegible] | 2.4 | [illegible] | | [illegible] | [illegible] | 3.4 | | 2.45 | 2.15 |
| [illegible] | [illegible] | | | | | 2.0 | | | | 2.7 | | |
| [illegible] | | [illegible] | [illegible] | 2.35 | [illegible] | | 2.35 | 2.45 | 3.5 | | 2.4 | 2.1 |
| [illegible] | 2.0 | | | | | 2.0 | | 2.5 | 3.6 | 2.7 | 2.35 | |
| [illegible] | | [illegible] | [illegible] | 2.4 | 2.0 | | 2.3 | | | | 2.3 | 2.2 |
| [illegible] | [illegible] | | | | | 2.0 | 2.3 | 2.7 | 3.5 | 2.6 | | |
| [illegible] | | [illegible] | [illegible] | 2.4 | | | | | 3.5 | | 2.3 | 2.1 |
| [illegible] | 2.0 | | 1.96 | | | 2.0 | | 2.7 | | 2.6 | 2.25 | |

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1903-1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | | | 2.3 | 2.6 | | 2.15 | 2.1 | 2.4 | 3.2 | 2.5 | | 2.0 |
| 2 | 2.1 | 2.1 | | | 2.1 | | | | | | 2.35 | |
| 3 | 2.0 | 2.0 | 2.2 | 2.5 | | 2.2 | 2.15 | 2.35 | 3.3 | 2.4 | | 2.15 |
| 4 | 2.0 | 2.0 | 2.25 | | 2.0 | 2.2 | | | 3.4 | | 2.3 | 2.1 |
| 5 | | | | 2.4 | 2.1 | | 2.1 | 2.4 | 3.2 | 2.45 | 2.3 | |
| 6 | 1.9 | 2.1 | 2.2 | | | 2.2 | 2.15 | | 3.25 | 2.4 | | 2.1 |
| 7 | 2.0 | | | 2.3 | 2.0 | 2.2 | | 2.4 | | | 2.2 | |
| 8 | | 2.0 | | | | 2.25 | 2.1 | 2.45 | 3.2 | 2.45 | | 2.0 |
| 9 | 1.9 | 2.25 | | 2.1 | 2.1 | | | | | | 2.1 | |
| 10 | 1.9 | | | | | 2.2 | 2.15 | 2.5 | 3.3 | 2.4 | | 2.05 |
| 11 | | 2.2 | | 2.0 | 2.0 | 2.25 | 2.2 | 2.55 | | | 2.1 | 2.0 |
| 12 | 1.95 | 2.2 | | | | | | | 3.15 | 2.4 | 2.0 | |
| 13 | 2.0 | | 2.3 | 2.0 | 2.1 | 2.2 | 2.15 | 2.5 | | | | 2.0 |
| 14 | | 2.1 | | | | | | | 3.2 | 2.4 | 2.2 | |
| 15 | 1.95 | | 2.4 | 2.0 | 2.1 | 2.2 | 2.2 | 2.6 | | | | 2.0 |
| 16 | | 2.2 | | | | | 2.1 | 2.6 | 3.1 | 2.45 | 2.15 | |
| 17 | 2.1 | | 2.3 | 2.0 | 2.1 | 2.2 | 2.2 | 2.6 | 3.15 | 2.4 | | 2.05 |
| 18 | | 2.15 | | | 2.1 | | | 2.6 | 3.0 | | 2.1 | |
| 19 | 2.0 | | 2.3 | 2.0 | | 2.2 | 2.15 | | 3.0 | 2.45 | | 2.0 |
| 20 | | 2.25 | | | 2.1 | | 2.2 | 2.7 | | | 2.0 | |
| 21 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | | | 2.9 | 2.4 | | 2.05 |
| 22 | | | | | | | 2.15 | 2.7 | 2.9 | | 2.1 | |
| 23 | 2.0 | 2.2 | 2.3 | 2.1 | 2.1 | 2.15 | | | 2.7 | 2.45 | | 2.0 |
| 24 | 2.1 | 2.15 | 2.3 | | | | 2.3 | 2.8 | 2.6 | | 2.0 | |
| 25 | | 2.2 | | 2.1 | 2.15 | 2.1 | 2.3 | | | 2.4 | | 2.05 |
| 26 | 2.0 | | 2.3 | | | | 2.4 | 2.9 | 2.55 | | 2.1 | |
| 27 | | 2.3 | | 2.1 | 2.1 | 2.1 | 2.35 | 2.95 | 2.5 | 2.5 | | 2.0 |
| 28 | 2.1 | | 2.3 | | 2.1 | | 2.4 | | | 2.6 | 2.0 | |
| 29 | | 2.15 | 2.3 | 2.1 | | 2.1 | | 2.8 | 2.5 | | | 1.9 |
| 30 | 2.0 | | | | | | 2.35 | | | 2.5 | 2.1 | 1.85 |
| 31 | 2.1 | | 2.3 | 2.0 | | 2.1 | | 3.0 | | 2.35 | | |
| 1910-11. | | | | | | | | | | | | |
| 1 | 1.95 | 2.0 | 1.9 | 1.95 | 2.6 | 2.15 | 2.6 | 2.53 | 2.75 | | 3.4 | 2.5 |
| 2 | | | | | | | | | | 3.45 | | |
| 3 | 1.95 | 2.1 | 1.9 | 1.95 | 2.4 | 2.1 | 2.65 | 2.4 | 2.85 | 3.45 | 3.45 | 2.4 |
| 4 | | | 2.0 | | | | | | | | 2.92 | 2.4 |
| 5 | 2.0 | 2.0 | | 2.0 | 2.4 | 2.15 | 2.7 | 2.45 | 2.9 | 3.75 | 3.35 | |
| 6 | | 2.05 | 1.9 | | | | | | | 3.8 | | 2.35 |
| 7 | 2.0 | | | 1.95 | 2.35 | 2.2 | 2.6 | 2.4 | 2.85 | 3.8 | 3.4 | |
| 8 | | 2.0 | 1.95 | | | | | 2.4 | 2.9 | 3.83 | | 2.35 |
| 9 | 2.1 | | | | 2.25 | 2.6 | 2.5 | | | | 3.2 | |
| 10 | | 2.05 | 1.85 | 2.1 | | 2.2 | | 2.4 | 2.9 | 3.75 | | 2.3 |
| 11 | 2.06 | | 1.85 | | 2.2 | | 2.3 | 2.4 | 2.95 | | 3.23 | |
| 12 | | 2.0 | | 2.0 | | 2.2 | | | | 3.8 | | 2.35 |
| 13 | 2.1 | | 1.9 | | 2.2 | | 2.25 | 2.45 | 2.95 | 3.73 | 2.9 | |
| 14 | 2.1 | 2.06 | | 2.1 | | 2.23 | | 2.4 | 3.0 | | | 2.35 |
| 15 | | | 1.95 | 2.0 | 2.25 | | 2.3 | | | 4.0 | 3.0 | |
| 16 | 2.15 | 1.95 | | | | 2.15 | | 2.45 | 3.2 | 3.93 | | 2.35 |
| 17 | | 1.9 | 1.95 | 2.1 | 2.15 | 2.2 | 2.35 | 2.45 | 3.4 | | 2.85 | |
| 18 | 2.06 | | 2.0 | | | 2.15 | | | 3.7 | 3.95 | 2.9 | 2.35 |
| 19 | | 1.85 | | 2.05 | 2.2 | | 2.4 | 2.55 | 3.77 | | | |
| 20 | 2.1 | | 2.0 | | | 2.25 | | | | 3.66 | 2.75 | 2.3 |
| 21 | 2.0 | 1.9 | | 2.1 | 2.1 | | 2.45 | 2.5 | 3.95 | | | |
| 22 | | | 2.0 | 2.0 | | 2.3 | | 2.6 | | 3.7 | 2.8 | 2.3 |
| 23 | 2.0 | 1.8 | | | 2.1 | 2.4 | 2.5 | | 3.8 | | | |
| 24 | | | 1.95 | 2.1 | | 2.4 | | 2.7 | 3.8 | 3.56 | 2.7 | 2.3 |
| 25 | 2.06 | 1.85 | | 2.15 | 2.1 | | 2.56 | | | | | |
| 26 | 2.1 | | 2.0 | 2.0 | 2.15 | 2.5 | | 2.7 | 3.6 | 3.5 | 2.6 | 2.3 |
| 27 | 2.1 | | | 2.1 | | | 2.53 | | | | | |
| 28 | | 1.8 | 1.95 | | 2.1 | 2.5 | | 2.75 | 3.55 | 3.5 | 2.5 | 2.33 |
| 29 | 2.1 | 1.85 | 1.95 | | | | 2.55 | | | | 2.55 | |
| 30 | 2.0 | | | 2.6 | | 2.6 | 2.5 | 2.7 | 3.4 | 3.53 | | 2.3 |
| 31 | 2.1 | | 2.0 | | | 2.55 | | | | | 2.45 | |

*Daily gage height, in feet, of Owens River near Round Valley, Cal., for 1903–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 2.3 | | | 2.0 | 2.0 | 2.1 | | 2.0 | 2.9 |
| 2 | | 2.25 | 2.18 | | | | 2.2 | | |
| 3 | 2.3 | | | 1.95 | 2.0 | | | 2.1 | 2.85 |
| 4 | | | 2.1 | | | 2.15 | 2.25 | | |
| 5 | 2.33 | 2.3 | | 1.95 | 1.98 | | | 1.8 | 2.75 |
| 6 | 2.3 | | 2.15 | | | 2.15 | 2.2 | | |
| 7 | 2.25 | 2.25 | | 1.97 | 2.0 | | | 1.75 | 2.7 |
| 8 | 2.3 | | 2.1 | | | 2.2 | 2.15 | | |
| 9 | | 2.25 | | 1.93 | 1.95 | | | 2.1 | 2.55 |
| 10 | 2.23 | | 2.13 | | | 2.2 | 2.1 | | |
| 11 | | 2.25 | | 2.0 | 2.0 | | | 1.95 | 2.5 |
| 12 | 2.3 | | 2.1 | | | 2.15 | 2.05 | | 2.45 |
| 13 | | 2.3 | 2.1 | 1.98 | 2.0 | | | 1.9 | 2.45 |
| 14 | 2.3 | | 2.13 | | | 2.1 | 2.0 | | 2.45 |
| 15 | 2.3 | 2.15 | | 2.05 | 2.0 | | | 2.0 | |
| 16 | 2.3 | | 2.1 | | | 2.15 | 2.2 | | 2.4 |
| 17 | 2.3 | 2.19 | 2.1 | 2.0 | 2.1 | | | 2.0 | 2.45 |
| 18 | | | | 1.98 | | 2.1 | 2.1 | 2.05 | |
| 19 | 2.3 | 2.2 | 2.13 | 1.98 | 2.1 | 2.15 | | | 2.4 |
| 20 | | | | | | | 2.2 | 2.0 | 2.35 |
| 21 | 2.3 | 2.15 | 2.1 | 2.0 | 2.1 | 2.15 | | | 2.3 |
| 22 | | 2.18 | | | | | 2.15 | 2.1 | |
| 23 | 2.25 | | 2.1 | 2.0 | 2.1 | 2.1 | | 2.2 | 2.4 |
| 24 | | 2.1 | 2.13 | | | | 2.1 | | 2.35 |
| 25 | 2.3 | | | 2.0 | 2.15 | 2.15 | | 2.35 | |
| 26 | | 2.15 | | | | | 2.0 | | 2.4 |
| 27 | 2.2 | | 2.1 | 1.93 | 2.1 | 2.2 | | 2.45 | 2.3 |
| 28 | | 2.2 | 2.13 | | | | 2.05 | | 2.3 |
| 29 | 2.25 | | | 2.0 | 2.1 | 2.2 | | 2.75 | |
| 30 | | 2.15 | 2.1 | 1.98 | | | 1.9 | | |
| 31 | 2.2 | | | | | 2.2 | | 2.8 | |

NOTE.—Gage destroyed Mar. 19, 1907. Gage heights Mar. 20–31, 1907, estimated by comparison with Rock and Pine creeks. New gage installed May 29, 1907, about 100 feet below original location.

*Rating tables for Owens River near Round Valley, Cal.*

**August 4, 1903, to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.60 | 132 | 2.20 | 272 | 2.70 | 412 | 3.20 | 568 |
| 1.70 | 152 | 2.30 | 298 | 2.80 | 442 | 3.30 | 601 |
| 1.80 | 172 | 2.40 | 325 | 2.90 | 473 | 3.40 | 636 |
| 1.90 | 196 | 2.50 | 353 | 3.00 | 504 | 3.50 | 675 |
| 2.00 | 221 | 2.60 | 382 | 3.10 | 536 | 3.60 | 715 |
| 2.10 | 246 | | | | | | |

**January 1 to October 10, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.80 | 134 | 2.20 | 240 | 2.60 | 377 | 3.00 | 533 |
| 1.90 | 158 | 2.30 | 271 | 2.70 | 415 | | |
| 2.00 | 184 | 2.40 | 304 | 2.80 | 453 | | |
| 2.10 | 211 | 2.50 | 339 | 2.90 | 493 | | |

NOTE.—Table based on 12 discharge measurements made during 1904-5. It is fairly well defined between gage heights 1.9 feet and 3.1 feet.

**October 11 to December 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.70 | 141 | 1.80 | 165 | 1.90 | 191 | 2.00 | 219 |

NOTE.—Table is based on three discharge measurements made during the latter part of 1905 and is fairly well defined.

*Rating tables for Owens River near Round Valley, Cal.*—Continued.

**January 1, 1906, to March 31, 1907.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.60 | 132 | 2.30 | 297 | 3.00 | 512 | 3.70 | 750 |
| 1.70 | 152 | 2.40 | 326 | 3.10 | 545 | 3.80 | 785 |
| 1.80 | 172 | 2.50 | 355 | 3.20 | 578 | 3.90 | 821 |
| 1.90 | 194 | 2.60 | 385 | 3.30 | 612 | 4.00 | 857 |
| 2.00 | 218 | 2.70 | 416 | 3.40 | 646 | 4.10 | 893 |
| 2.10 | 244 | 2.80 | 448 | 3.50 | 680 | 4.20 | 930 |
| 2.20 | 270 | 2.90 | 480 | 3.60 | 715 | | |

NOTE.—Table applicable only to open channel. It is based on discharge measurements made during 1903 to 1907, and is well defined between gage heights 1.7 feet and 2.8 feet.

**May 29, 1907, to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.90 | 174 | 2.50 | 307 | 3.10 | 617 | 3.60 | 932 |
| 2.00 | 191 | 2.60 | 342 | 3.20 | 679 | 3.70 | 997 |
| 2.10 | 210 | 2.70 | 386 | 3.30 | 741 | 3.80 | 1,062 |
| 2.20 | 231 | 2.80 | 441 | 3.40 | 804 | 3.90 | 1,127 |
| 2.30 | 253 | 2.90 | 498 | 3.50 | 868 | 4.00 | 1,192 |
| 2.40 | 278 | 3.00 | 557 | | | | |

NOTE.—Table applicable only to open channel. It is based on 21 discharge measurements made from August, 1907, to Dec. 31, 1908. It is fairly well defined between gage heights 1.9 feet and 3.3 feet.

*Daily discharge, in second-feet, of Owens River near Round Valley, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 170 | 149 | 149 | 358 | 253 | 436 | 716 | 358 | 253 |
| 2 | 170 | 149 | 158 | 436 | 253 | 476 | 756 | 320 | 239 |
| 3 | 177 | 149 | 164 | 516 | 269 | 596 | 836 | 320 | 226 |
| 4 | 177 | 158 | 170 | 436 | 285 | 616 | 816 | 320 | 226 |
| 5 | 203 | 170 | 170 | 358 | 285 | 636 | 796 | 285 | 226 |
| 6 | 226 | 170 | 170 | 339 | 285 | 656 | 676 | 285 | 226 |
| 7 | 203 | 177 | 177 | 320 | 285 | 676 | 636 | 285 | 214 |
| 8 | 177 | 185 | 185 | 320 | 320 | 676 | 616 | 285 | 203 |
| 9 | 170 | 186 | 185 | 320 | 320 | 656 | 596 | 285 | 203 |
| 10 | 170 | 203 | 194 | 358 | 320 | 576 | 576 | 285 | 214 |
| 11 | 170 | 214 | 203 | 396 | 320 | 596 | 556 | 269 | 185 |
| 12 | 177 | 253 | 194 | 436 | 320 | 596 | 536 | 285 | 194 |
| 13 | 253 | 253 | 185 | 476 | 320 | 596 | 516 | 285 | 203 |
| 14 | 358 | 239 | 194 | 476 | 320 | 596 | 516 | 285 | 194 |
| 15 | 302 | 226 | 203 | 476 | 320 | 596 | 516 | 285 | 185 |
| 16 | 253 | 203 | 194 | 476 | 320 | 596 | 516 | 285 | 194 |
| 17 | 253 | 214 | 185 | 476 | 320 | 596 | 496 | 320 | 203 |
| 18 | 253 | 185 | 203 | 456 | 320 | 616 | 476 | 320 | 203 |
| 19 | 253 | 177 | 170 | 436 | 285 | 636 | 476 | 320 | 214 |
| 20 | 253 | 170 | 164 | 396 | 339 | 636 | 456 | 339 | 203 |
| 21 | 253 | 170 | 158 | 377 | 320 | 676 | 436 | 358 | 226 |
| 22 | 269 | 170 | 153 | 358 | 320 | 676 | 456 | 339 | 203 |
| 23 | 269 | 164 | 149 | 339 | 320 | 676 | 436 | 320 | 203 |
| 24 | 285 | 158 | 164 | 320 | 320 | 676 | 416 | 302 | 214 |
| 25 | 269 | 170 | 185 | 285 | 320 | 696 | 396 | 285 | 203 |
| 26 | 269 | 177 | 185 | 269 | 302 | 716 | 396 | 285 | 203 |
| 27 | 269 | 185 | 185 | 253 | 320 | 756 | 396 | 269 | 214 |
| 28 | 285 | 185 | 185 | 253 | 358 | 736 | 377 | 253 | 226 |
| 29 | 285 | ........ | 185 | 253 | 396 | 716 | 358 | 253 | 214 |
| 30 | 285 | ........ | 185 | 253 | 396 | 716 | 358 | 253 | 203 |
| 31 | 194 | ........ | 185 | ........ | 396 | ........ | 358 | 239 | ........ |

[illegible] — Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | ...... | [illegible] | [illegible] | | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | |
| 1910-11. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | 184 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 240 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 530 | [illegible] |
| 16 | [illegible] | 184 | 184 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | 194 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 253 |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 253 |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 253 |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 355 | 253 |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 317 | 262 |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 336 | 256 |
| 30 | 177 | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | 730 | 796 | [illegible] | 253 |
| 31 | [illegible] | ...... | 177 | [illegible] | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | 300 | ...... |

*Daily discharge, in second-feet, of Owens River near Round Valley, Cal., for 1909–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 253 | 233 | 217 | 176 | 176 | 200 | 228 | 176 | 485 |
| 2 | 253 | 240 | 221 | 170 | 176 | 205 | 228 | 188 | 474 |
| 3 | 253 | 244 | 210 | 164 | 176 | 205 | 236 | 200 | 462 |
| 4 | 258 | 248 | 200 | 164 | 174 | 214 | 243 | 165 | 440 |
| 5 | 262 | 253 | 206 | 164 | 171 | 214 | 236 | 130 | 418 |
| 6 | 253 | 246 | 213 | 166 | 174 | 214 | 228 | 126 | 406 |
| 7 | 240 | 240 | 206 | 169 | 176 | 221 | 221 | 121 | 395 |
| 8 | 253 | 240 | 200 | 164 | 170 | 228 | 214 | 160 | 368 |
| 9 | 244 | 240 | 204 | 159 | 164 | 228 | 207 | 200 | 340 |
| 10 | 234 | 240 | 208 | 167 | 170 | 228 | 200 | 182 | 331 |
| 11 | 244 | 240 | 204 | 176 | 176 | 221 | 194 | 164 | 322 |
| 12 | 253 | 246 | 200 | 174 | 176 | 214 | 188 | 158 | 306 |
| 13 | 253 | 253 | 200 | 171 | 176 | 207 | 182 | 152 | 306 |
| 14 | 253 | 233 | 208 | 180 | 176 | 200 | 176 | 164 | 306 |
| 15 | 253 | 213 | 204 | 188 | 176 | 207 | 200 | 176 | 298 |
| 16 | 253 | 218 | 200 | 182 | 188 | 214 | 228 | 176 | 290 |
| 17 | 253 | 223 | 200 | 176 | 200 | 207 | 214 | 176 | 306 |
| 18 | 253 | 224 | 204 | 171 | 200 | 200 | 200 | 188 | 298 |
| 19 | 253 | 226 | 208 | 171 | 200 | 214 | 214 | 182 | 290 |
| 20 | 253 | 220 | 204 | 174 | 200 | 214 | 228 | 176 | 274 |
| 21 | 253 | 213 | 200 | 176 | 200 | 214 | 221 | 188 | 258 |
| 22 | 246 | 221 | 200 | 176 | 200 | 207 | 214 | 200 | 274 |
| 23 | 240 | 210 | 200 | 176 | 200 | 200 | 207 | 228 | 290 |
| 24 | 246 | 200 | 208 | 176 | 207 | 207 | 200 | 251 | 274 |
| 25 | 253 | 206 | 206 | 176 | 214 | 214 | 188 | 274 | 282 |
| 26 | 240 | 213 | 204 | 168 | 207 | 221 | 176 | 290 | 290 |
| 27 | 226 | 220 | 200 | 159 | 200 | 228 | 182 | 306 | 258 |
| 28 | 233 | 226 | 208 | 168 | 200 | 228 | 188 | 362 | 258 |
| 29 | 240 | 220 | 204 | 176 | 200 | 228 | 170 | 418 | 258 |
| 30 | 233 | 213 | 200 | 171 | ........ | 228 | 152 | 429 | 258 |
| 31 | 226 | ........ | 200 | 174 | ........ | 228 | ........ | 440 | ........ |

NOTE.—Daily discharge determined from fairly well defined rating curves applicable as follows: Jan. 1 to Dec. 31, 1909, Jan. 1 to Dec. 31, 1910, Jan. 1 to Dec. 31, 1911, Jan. 1 to June 30, 1912. Discharge interpolated or estimated for days on which gage was not read.

*Monthly discharge of Owens River near Round Valley, Cal., for 1903–1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1903. | | | | | |
| August 4–31 | 196 | 148 | 169 | 9,386 | |
| September | 172 | 152 | 167 | 9,937 | |
| 1903–4. | | | | | |
| October | 179 | 152 | 172 | 10,576 | |
| November | 196 | 152 | 163 | 9,699 | |
| December | 172 | 152 | 161 | 9,900 | |
| January | 184 | 152 | 156.6 | 9,629 | |
| February | 353 | 172 | 220.9 | 12,706 | |
| March | 458 | 196 | 259.7 | 15,968 | |
| April | 246 | 172 | 201.5 | 11,990 | |
| May | 442 | 172 | 299.5 | 18,416 | |
| June | 635 | 382 | 532 | 31,656 | |
| July | 504 | 353 | 428 | 26,317 | |
| August | 412 | 285 | 336 | 20,660 | |
| September | 489 | 221 | 281 | 16,721 | |
| The year | 635 | 152 | 268 | 184,000 | |
| 1904–5. | | | | | |
| October | 298 | 221 | 266 | 16,356 | |
| November | 298 | 221 | 246 | 14,638 | |
| December | 246 | 172 | 218 | 13,404 | |
| January | 240 | 158 | 193 | 11,870 | |
| February | 240 | 146 | 196 | 10,880 | |
| March | 339 | 158 | 213 | 13,100 | |

*Monthly discharge of Owens River near Round Valley, Cal., for 1903-1912*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1904-5.** | | | | | |
| April | 211 | 158 | 177 | 10,530 | |
| May | 358 | 184 | 246 | 15,130 | |
| June | 533 | 271 | 392 | 23,330 | |
| July | 377 | 184 | 275 | 16,910 | |
| August | 211 | 146 | 169 | 10,390 | |
| September | 184 | 158 | 190 | 10,710 | |
| The year | 533 | 146 | 231 | 167,000 | |
| **1905-6.** | | | | | |
| October | 219 | 153 | 180 | 11,070 | |
| November | 219 | 153 | 197 | 11,720 | |
| December | 219 | 153 | 179 | 11,010 | |
| January | 257 | 162 | 199 | 12,200 | |
| February | 218 | 183 | 205 | 11,400 | |
| March | 355 | 206 | 270 | 16,600 | |
| April | 432 | 244 | 345 | 20,500 | |
| May | 409 | 270 | 328 | 20,200 | |
| June | 830 | 326 | 634 | 37,100 | |
| July | 732 | 663 | 696 | 42,800 | |
| August | 680 | 385 | 535 | 32,900 | |
| September | 385 | 284 | 330 | 19,500 | |
| The year | 830 | 153 | 341 | 247,000 | |
| **1906-7.** | | | | | |
| October | 312 | 244 | 273 | 16,800 | |
| November | 257 | 218 | 239 | 14,200 | |
| December | 270 | 218 | 256 | 15,700 | |
| January | 284 | 183 | 247 | 15,200 | A. |
| February | 312 | 257 | 281 | 15,600 | A. |
| March | 929 | 231 | 341 | 21,000 | B. |
| April | ........ | ........ | 270 | 16,100 | D. |
| May | ........ | ........ | 438 | 26,900 | D. |
| June | 1,190 | 387 | 616 | 36,700 | B. |
| July | 932 | 710 | 856 | 52,600 | B. |
| August | 836 | 307 | 432 | 26,600 | B. |
| September | 342 | 278 | 306 | 18,100 | B. |
| The year | 1,190 | 183 | 380 | 276,000 | |
| **1907-8.** | | | | | |
| October | 324 | 266 | 285 | 17,500 | B. |
| November | 266 | 242 | 252 | 15,000 | B. |
| December | 278 | 220 | 245 | 15,100 | B. |
| January | 253 | 210 | 227 | 14,000 | B. |
| February | 242 | 210 | 223 | 12,800 | B. |
| March | 441 | 210 | 279 | 17,200 | B. |
| April | 342 | 210 | 242 | 14,400 | B. |
| May | 342 | 253 | 274 | 16,800 | B. |
| June | 386 | 266 | 313 | 18,600 | B. |
| July | 342 | 253 | 289 | 17,800 | B. |
| August | 342 | 231 | 264 | 16,200 | B. |
| September | 253 | 191 | 222 | 13,200 | B. |
| The year | 441 | 191 | 260 | 189,000 | |
| **1908-9.** | | | | | |
| October | 210 | 182 | 192 | 11,800 | B. |
| November | 191 | 182 | 184 | 10,900 | B. |
| December | 191 | 174 | 182 | 11,200 | B. |
| January | 358 | 170 | 235 | 14,400 | B. |
| February | 253 | 149 | 186 | 10,300 | C. |
| March | 203 | 149 | 179 | 11,000 | C. |
| April | 516 | 253 | 374 | 22,300 | B. |
| May | 396 | 253 | 317 | 19,400 | B. |
| June | 756 | 436 | 637 | 37,900 | A. |
| July | 836 | 358 | 531 | 32,600 | A. |
| August | 358 | 239 | 296 | 18,200 | B. |
| September | 253 | 185 | 211 | 12,600 | B. |
| The year | 836 | 149 | 294 | 213,000 | |
| **1909-10.** | | | | | |
| October | 214 | 170 | 188 | 11,600 | B. |
| November | 253 | 185 | 217 | 12,900 | B. |
| December | 285 | 226 | 249 | 15,300 | B. |
| January | 370 | 177 | 222 | 13,600 | B. |
| February | 221 | 177 | 201 | 11,200 | B. |

*Monthly discharge of Owens River near Round Valley, Cal., for 1903-1912*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1909-10.** | | | | | |
| March | 252 | 206 | 227 | 14,000 | A. |
| April | 301 | 206 | 237 | 14,100 | A. |
| May | 517 | 284 | 374 | 23,000 | A. |
| June | 676 | 335 | 519 | 30,900 | A. |
| July | 370 | 284 | 314 | 19,300 | A. |
| August | 284 | 177 | 216 | 13,300 | A. |
| September | 221 | 139 | 184 | 10,900 | B. |
| The year | 676 | 139 | 262 | 190,000 | |
| **1910-11.** | | | | | |
| October | 221 | 164 | 192 | 11,800 | B. |
| November | 206 | 127 | 163 | 9,700 | B. |
| December | 177 | 139 | 163 | 10,000 | B. |
| January | 420 | 164 | 203 | 12,500 | B. |
| February | 356 | 200 | 238 | 13,200 | B. |
| March | 355 | 200 | 257 | 15,800 | B. |
| April | 395 | 240 | 313 | 18,600 | B. |
| May | 418 | 283 | 331 | 20,400 | B. |
| June | 1,080 | 418 | 674 | 40,100 | A. |
| July | 1,050 | 742 | 881 | 54,200 | A. |
| August | 755 | 300 | 512 | 31,500 | A. |
| September | 317 | 253 | 257 | 15,300 | B. |
| The year | 1,080 | 127 | 349 | 253,000 | |
| **1911-12.** | | | | | |
| October | 262 | 226 | 247 | 15,200 | B. |
| November | 253 | 200 | 229 | 13,600 | B. |
| December | 221 | 200 | 205 | 12,600 | B. |
| January | 188 | 159 | 172 | 10,600 | B. |
| February | 214 | 164 | 187 | 10,800 | B. |
| March | 228 | 200 | 215 | 13,200 | A. |
| April | 243 | 152 | 205 | 12,200 | A. |
| May | 440 | 121 | 218 | 13,400 | A. |
| June | 485 | 258 | 327 | 19,500 | A. |
| The period | | | | 121,000 | |

NOTE.—Monthly mean estimated for April and May, 1907. Discharge interpolated for days on which gage was not read.

## OWENS RIVER NEAR TINEMAHA, CAL.

This station, which is located at a basaltic knoll known as Charlies Butte, in the floor of the valley about 7 miles south of Tinemaha, in sec. 2, T. 11 S., R. 34 E., was regularly established September 20, 1906, but the city of Los Angeles had made frequent measurements since the beginning of 1906.

Tinemaha Creek is the first tributary above and Taboose the next below the station. There are diversions for irrigation above the station.

The gage is a vertical staff on the left bank; its datum has not been changed since the station was established.

Discharge measurements are made from a car and cable at the gage. When the discharge exceeds 1,800 second-feet, the river overflows the left bank and the station is inaccessible. At such times measurements are made from the county bridge near Citrus.

The channel is composed of sand and gravel and is somewhat shifting.

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] Jones. | [illegible] | [illegible] |
| [illegible] | | | | Sept. [illegible] | [illegible] | 1.43 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.44 | 432 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.9[illegible] | 4[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 47[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Jan. [illegible] | [illegible] Jones. | 1.06 | 514 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.92 | 452 |
| [illegible] | [illegible] | [illegible] | [illegible] | Feb. [illegible] | [illegible] | 2.75 | 428 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.30 | 345 |
| [illegible] | [illegible] | [illegible] | [illegible] | Mar. 4 | [illegible] | 2.10 | 301 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.27 | 352 |
| [illegible] | [illegible] | [illegible] | [illegible] | Apr. [illegible] | [illegible] | 1.53 | 290 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.95 | 276 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .97 | 137 |
| [illegible] | [illegible] | [illegible] | [illegible] | May [illegible] | [illegible] | 1.38 | 194 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.13 | 177 |
| [illegible] | [illegible] | [illegible] | [illegible] | June [illegible] | [illegible] | 3.00 | 493 |
| [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | 2.41 | 358 |

*Daily gage height, in feet, of Owens River near Tinemaha, Cal., for 1906–1912.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | | | | | | | | |
| 1 | | 1.45 | 1.8 | 2.15 | 2.7 | 3.05 | 2.3 | 2.9 | 0.9 | 2.0 | 4.5 | 5.0 | 2.2 |
| 2 | | 1.52 | 1.85 | 2.2 | 2.65 | 3.0 | 2.25 | 2.9 | .85 | 2.5 | 5.0 | 4.9 | 2.1 |
| 3 | | 1.45 | 1.9 | 2.3 | 2.6 | 3.0 | 2.3 | 2.85 | .8 | 2.9 | 5.6 | 4.8 | 2.05 |
| 4 | | 1.4 | 1.9 | 2.45 | 2.5 | 2.95 | 2.35 | 2.7 | .75 | 3.1 | 6.05 | 4.75 | 2.0 |
| 5 | | 1.4 | 1.95 | 2.6 | 2.45 | 2.9 | 2.85 | 2.6 | .85 | 3.6 | 6.5 | 4.8 | 1.95 |
| 6 | | 1.38 | 2.0 | 2.7 | 2.5 | 2.95 | 3.45 | 2.5 | 1.0 | 3.9 | 6.9 | 4.85 | 1.9 |
| 7 | | 1.4 | 2.0 | 2.65 | 2.55 | 3.0 | 3.3 | 2.4 | 1.15 | 3.95 | 7.25 | 4.65 | 1.85 |
| 8 | | 1.4 | 2.05 | 2.6 | 2.6 | 3.0 | 3.05 | 2.2 | 1.25 | 3.9 | 7.35 | 4.45 | 1.8 |
| 9 | | 1.38 | 2.05 | 2.55 | 2.7 | 3.0 | 2.8 | 2.1 | 1.3 | 3.8 | 7.3 | 4.2 | 1.75 |
| 10 | | 1.36 | 2.05 | 2.5 | 2.8 | 2.9 | 2.65 | 2.0 | 1.3 | 3.7 | 7.2 | 4.0 | 1.75 |
| 11 | | 1.35 | 2.0 | 2.45 | 2.85 | 2.8 | 2.5 | 1.9 | 1.35 | 3.6 | 6.75 | 3.75 | 1.8 |
| 12 | | 1.35 | 2.0 | 2.5 | 2.95 | 2.7 | 2.4 | 1.8 | 1.3 | 3.6 | 6.65 | 3.7 | 1.8 |
| 13 | | 1.3 | 2.0 | 2.7 | 3.0 | 2.6 | 2.35 | 1.7 | 1.3 | 3.55 | 6.6 | 3.5 | 1.85 |
| 14 | | 1.35 | 2.0 | 2.8 | 2.95 | 2.5 | 2.35 | 1.6 | 1.3 | 3.55 | 5.9 | 3.4 | 1.9 |
| 15 | | 1.38 | 2.05 | 2.7 | 2.9 | 2.4 | 2.4 | 1.7 | 1.3 | 3.5 | 5.8 | 3.3 | 1.8 |
| 16 | | 1.45 | 2.1 | 2.7 | 2.85 | 2.3 | 2.35 | 1.75 | 1.25 | 3.5 | 5.7 | 3.25 | 1.7 |
| 17 | | 1.55 | 2.05 | 2.6 | 2.8 | 2.4 | 2.45 | 1.65 | 1.4 | 3.4 | 5.6 | 3.2 | 1.65 |
| 18 | | 1.57 | 2.05 | 2.55 | 2.75 | 2.55 | 3.0 | 1.55 | 1.45 | 3.3 | 5.5 | 3.25 | 1.6 |
| 19 | | 1.58 | 2.05 | 2.5 | 2.7 | 2.45 | 4.0 | 1.4 | 1.55 | 3.3 | 5.4 | 3.3 | 1.6 |
| 20 | 1.85 | 1.6 | 2.0 | 2.45 | 2.7 | 2.55 | 4.9 | 1.3 | 1.7 | 3.1 | 5.2 | 3.2 | 1.6 |
| 21 | 1.82 | 1.55 | 2.0 | 2.4 | 2.7 | 2.6 | 6.0 | 1.25 | 1.8 | 3.05 | 5.0 | 3.1 | 1.6 |
| 22 | 1.8 | 1.57 | 2.0 | 2.35 | 2.6 | 2.6 | a5.6 | 1.2 | 1.85 | 3.0 | 4.9 | 3.0 | 1.6 |
| 23 | 1.75 | 1.6 | 2.0 | 2.35 | 2.5 | 2.65 | a5.2 | 1.15 | 1.9 | 3.0 | 4.8 | 2.9 | 1.6 |
| 24 | 1.72 | 1.7 | 2.0 | 2.4 | 2.5 | 2.6 | a4.8 | 1.1 | 1.9 | 3.15 | 4.75 | 2.85 | 1.55 |
| 25 | 1.6 | 1.82 | 2.1 | 2.45 | 2.55 | 2.55 | a4.4 | 1.0 | 1.85 | 3.3 | 4.9 | 2.7 | 1.55 |
| 26 | 1.5 | 1.85 | 2.05 | 2.5 | 2.6 | 2.5 | a4.1 | .9 | 1.85 | 3.5 | 5.1 | 2.6 | 1.55 |
| 27 | 1.45 | 1.87 | 2.1 | 2.55 | 2.7 | 2.45 | a3.8 | .8 | 1.85 | 3.65 | 5.3 | 2.55 | 1.55 |
| 28 | 1.4 | 1.85 | 2.2 | 2.6 | 2.8 | 2.4 | a3.5 | .85 | 1.85 | 3.8 | 5.25 | 2.5 | 1.55 |
| 29 | 1.35 | 1.9 | 2.3 | 2.65 | 2.9 | | a3.1 | .9 | 1.9 | 3.9 | 5.2 | 2.4 | 1.55 |
| 30 | 1.38 | 1.8 | 2.2 | 2.7 | 3.0 | | 2.85 | .9 | 1.95 | 4.0 | 5.15 | 2.3 | 1.55 |
| 31 | | 1.8 | | 2.75 | 3.1 | | 2.9 | | 2.0 | | 5.1 | 2.25 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 1.6 | 3.3 | 2.7 | 2.75 | 2.95 | 2.8 | 1.55 | 0.25 | 0.3 | 0.5 | 1.4 | 0.6 |
| 2 | 1.65 | 3.2 | 2.7 | 2.7 | 3.1 | 2.75 | 1.45 | .25 | .25 | .55 | 1.5 | .6 |
| 3 | 1.7 | 3.15 | 2.7 | 2.7 | 3.3 | 2.7 | 1.35 | .2 | .25 | .6 | 1.6 | .55 |
| 4 | 1.75 | 3.1 | 2.7 | 2.7 | 3.45 | 2.6 | 1.3 | .2 | .3 | .7 | 2.2 | .5 |
| 5 | 1.8 | 3.05 | 2.75 | 2.7 | 3.55 | 2.6 | 1.25 | .25 | .25 | .85 | 2.6 | .45 |
| 6 | 1.9 | 3.0 | 2.8 | 2.7 | 3.4 | 2.6 | 1.2 | .3 | .2 | 1.0 | 3.0 | .4 |
| 7 | 2.05 | 3.0 | 2.9 | 2.7 | 3.25 | 2.55 | 1.15 | .2 | .2 | 1.35 | 3.05 | .5 |
| 8 | 2.1 | 3.0 | 3.1 | 2.7 | 3.1 | 2.55 | 1.15 | .2 | .2 | 1.4 | 2.8 | .55 |
| 9 | 2.2 | 3.0 | 3.05 | 2.65 | 3.05 | 2.55 | 1.15 | .2 | .1 | 1.3 | 2.6 | .6 |
| 10 | 2.25 | 3.0 | 3.05 | 2.65 | 3.1 | 2.55 | 1.2 | .2 | .1 | 1.4 | 2.45 | .9 |
| 11 | 2.2 | 2.95 | 3.2 | 2.7 | 3.05 | 2.55 | 1.25 | .2 | .05 | 1.6 | 2.4 | 1.1 |
| 12 | 2.15 | 2.9 | 3.15 | 2.7 | 3.0 | 2.55 | 1.15 | .2 | .0 | 1.6 | 2.15 | 1.0 |
| 13 | 2.1 | 2.9 | 3.0 | 2.75 | 2.9 | 2.6 | 1.1 | .2 | −.05 | 1.7 | 2.0 | 1.1 |
| 14 | 2.15 | 2.9 | 3.0 | 2.8 | 2.8 | 2.6 | 1.05 | .2 | −.05 | 1.7 | 1.8 | 1.1 |
| 15 | 2.2 | 2.85 | 2.9 | 2.8 | 2.7 | 2.8 | 1.0 | .25 | −.05 | 1.75 | 1.65 | 1.15 |
| 16 | 2.3 | 2.8 | 2.85 | 2.8 | 2.7 | 3.0 | .9 | .25 | −.05 | 1.8 | 1.55 | 1.2 |
| 17 | 2.4 | 2.8 | 2.8 | 2.75 | 2.7 | 3.25 | .75 | .2 | .4 | 1.65 | 1.5 | 1.2 |
| 18 | 2.5 | 2.8 | 2.8 | 2.7 | 2.7 | 3.4 | .75 | .25 | .5 | 1.4 | 1.35 | 1.25 |
| 19 | 2.6 | 2.8 | 2.8 | 2.7 | 2.7 | 3.4 | .7 | .25 | .4 | 1.25 | 1.2 | 1.3 |
| 20 | 2.6 | 2.8 | 2.75 | 2.7 | 2.7 | 3.15 | .8 | .2 | .3 | 1.1 | 1.05 | 1.35 |
| 21 | 2.6 | 2.8 | 2.75 | 2.7 | 2.7 | 2.9 | .65 | .2 | .2 | 1.1 | .9 | 1.35 |
| 22 | 2.7 | 2.8 | 2.75 | 2.7 | 2.8 | 2.7 | .5 | .2 | .2 | 1.05 | .9 | 1.3 |
| 23 | 2.85 | 2.75 | 2.7 | 2.8 | 3,2 | 2.5 | .5 | .2 | .15 | 1.0 | .85 | 1.3 |
| 24 | 3.05 | 2.75 | 2.7 | 3.0 | 3.1 | 2.4 | .45 | .2 | .15 | .9 | .8 | 1.35 |
| 25 | 3.3 | 2.75 | 2.7 | 3.0 | 2.9 | 2.3 | .4 | .25 | .2 | .9 | .75 | 1.4 |
| 26 | 3.15 | 2.75 | 2.75 | 3.0 | 2.85 | 2.2 | .4 | .3 | .2 | .8 | .75 | 1.5 |
| 27 | 3.4 | 2.75 | 2.75 | 3.05 | 2.8 | 2.1 | .35 | .2 | .2 | .7 | .8 | 1.6 |
| 28 | 3.7 | 2.75 | 3.0 | 3.1 | 2.75 | 1.95 | .35 | .2 | .3 | .75 | .8 | 1.5 |
| 29 | 3.6 | 2.75 | 2.95 | 3.05 | 2.75 | 1.85 | .3 | .2 | .3 | .9 | .8 | 1.5 |
| 30 | 3.5 | 2.75 | 2.85 | 3.0 | | 1.75 | .3 | .2 | .4 | 1.1 | .7 | 1.55 |
| 31 | 3.4 | | 2.75 | 3,0 | | 1.65 | | .25 | | 1.25 | .6 | |

a Estimated.

*Daily gage height, in feet, of Owens River near Tinemaha, Cal., for 1906–1912—Contd.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1908–9.** | | | | | | | | | | | | |
| 1 | 1.55 | 2.25 | 2.25 | 2.35 | 2.75 | 2.55 | 2.25 | 0.6 | 1.7 | 6.4 | 2.5 | 1.75 |
| 2 | 1.55 | 2.25 | 2.3 | 2.35 | 2.7 | 2.55 | 2.25 | .55 | 1.7 | 6.35 | 2.35 | 1.9 |
| 3 | 1.4 | 2.25 | 2.4 | 2.4 | 2.6 | 2.55 | 2.25 | .5 | 2.05 | 6.3 | 2.2 | 1.75 |
| 4 | 1.5 | 2.3 | 2.5 | 2.5 | 2.6 | 2.5 | 2.3 | .5 | 2.5 | 6.5 | 2.1 | 1.5 |
| 5 | 1.55 | 2.25 | 2.55 | 2.6 | 2.65 | 2.4 | 2.35 | .5 | 3.1 | 6.7 | 2.05 | 1.4 |
| 6 | 1.6 | 2.25 | 2.5 | 2.8 | 2.8 | 2.4 | 2.45 | .5 | 3.7 | 6.9 | 2.0 | 1.4 |
| 7 | 1.6 | 2.25 | 2.45 | 3.0 | 2.9 | 2.4 | 2.3 | .45 | 4.3 | 6.4 | 1.9 | 1.4 |
| 8 | 1.55 | 2.2 | 2.45 | 3.1 | 3.1 | 2.4 | 2.15 | .4 | 4.7 | 5.95 | 1.8 | 1.35 |
| 9 | 1.55 | 2.25 | 2.4 | 3.3 | 3.15 | 2.35 | 2.05 | .5 | 4.5 | 5.2 | 1.75 | 1.3 |
| 10 | 1.5 | 2.25 | 2.4 | 3.35 | 3.25 | 2.25 | 2.2 | .6 | 4.4 | 4.5 | 1.7 | 1.25 |
| 11 | 1.5 | 2.2 | 2.35 | 3.2 | 3.3 | 2.2 | 2.2 | .7 | 4.1 | 4.0 | 1.7 | 1.25 |
| 12 | 1.5 | 2.2 | 2.3 | 3.1 | 3.4 | 2.2 | 2.15 | .85 | 3.9 | 4.2 | 1.7 | 1.2 |
| 13 | 1.55 | 2.25 | 2.3 | 3.2 | 3.8 | 2.15 | 2.2 | 1.0 | 4.0 | 4.4 | 1.7 | 1.2 |
| 14 | 1.6 | 2.25 | 2.25 | 3.5 | 3.1 | 2.15 | 2.25 | 1.3 | 4.2 | 4.6 | 1.65 | 1.2 |
| 15 | 1.6 | 2.25 | 2.25 | 3.55 | 3.25 | 2.15 | 2.2 | 1.15 | 4.4 | 4.55 | 1.6 | 1.2 |
| 16 | 1.65 | 2.25 | 2.2 | 3.8 | 3.3 | 2.15 | 2.15 | 1.0 | 4.55 | 4.5 | 1.6 | 1.2 |
| 17 | 1.7 | 2.25 | 2.2 | 3.6 | 3.2 | 2.2 | 2.05 | 1.0 | 4.65 | 4.45 | 1.55 | 1.2 |
| 18 | 1.7 | 2.2 | 2.15 | 3.45 | 3.1 | 2.15 | 1.9 | .95 | 4.7 | 4.4 | 1.5 | 1.2 |
| 19 | 1.7 | 2.2 | 2.1 | 3.3 | 3.05 | 2.1 | 1.9 | .8 | 4.8 | 4.2 | 1.5 | 1.2 |
| 20 | 1.8 | 2.2 | 2.0 | 3.2 | 3.0 | 2.1 | 1.9 | .7 | 4.45 | 4.0 | 1.5 | 1.2 |
| 21 | 1.9 | 2.2 | 2.05 | 4.0 | 2.9 | 2.15 | 1.75 | .55 | 4.35 | 3.8 | 1.55 | 1.2 |
| 22 | 2.0 | 2.25 | 2.1 | 4.4 | 2.8 | 2.2 | 1.6 | .5 | 4.3 | 3.5 | 1.6 | 1.2 |
| 23 | 2.05 | 2.25 | 2.2 | 4.4 | 2.7 | 2.25 | 1.45 | .6 | 4.4 | 3.35 | 1.7 | 1.2 |
| 24 | 2.1 | 2.25 | 2.2 | 3.9 | 2.7 | 2.25 | 1.35 | .75 | 4.65 | 3.35 | 1.8 | 1.2 |
| 25 | 2.1 | 2.2 | 2.2 | 3.6 | 2.7 | 2.3 | 1.2 | .95 | 5.0 | 3.4 | 1.8 | 1.2 |
| 26 | 2.1 | 2.2 | 2.2 | 3.3 | 2.6 | 2.35 | 1.0 | 1.15 | 5.5 | 3.4 | 1.6 | 1.2 |
| 27 | 2.1 | 2.2 | 2.25 | 3.15 | 2.6 | 2.4 | .85 | 1.25 | 5.95 | 3.35 | 1.45 | 1.25 |
| 28 | 2.1 | 2.2 | 2.25 | 3.0 | 2.55 | 2.35 | .75 | 1.35 | 6.2 | 3.2 | 1.4 | 1.3 |
| 29 | 2.15 | 2.25 | 2.3 | 2.9 | ....... | 2.3 | .80 | 1.4 | 6.35 | 3.0 | 1.35 | 1.35 |
| 30 | 2.2 | 2.25 | 2.3 | 2.8 | ....... | 2.25 | .70 | 1.5 | 6.4 | 2.9 | 1.45 | 1.45 |
| 31 | 2.2 | ....... | 2.3 | 2.8 | ....... | 2.25 | ....... | 1.65 | ....... | 2.7 | 1.6 | ....... |
| **1909–10.** | | | | | | | | | | | | |
| 1 | 1.3 | 2.1 | 2.65 | 4.4 | 2.9 | 2.75 | 1.95 | .8 | 3.0 | 1.5 | 1.55 | .65 |
| 2 | 1.3 | 2.1 | 2.6 | 5.1 | 2.75 | 2.8 | 1.9 | .8 | 3.3 | 1.5 | 1.45 | .65 |
| 3 | 1.4 | 2.1 | 2.6 | 5.75 | 2.7 | 2.85 | 1.8 | .75 | 3.3 | 1.4 | 1.35 | .65 |
| 4 | 1.6 | 2.1 | 2.55 | 4.5 | 2.6 | 2.85 | 1.7 | .75 | 3.3 | 1.3 | 1.25 | .65 |
| 5 | 1.75 | 2.1 | 2.5 | 3.55 | 2.75 | 2.8 | 1.6 | .7 | 3.35 | 1.25 | 1.15 | .65 |
| 6 | 1.8 | 2.1 | 2.45 | 3.5 | 2.9 | 2.85 | 1.45 | .7 | 3.0 | 1.25 | 1.1 | .6 |
| 7 | 1.9 | 2.2 | 2.4 | 3.55 | 2.9 | 2.9 | 1.3 | .7 | 3.0 | 1.25 | 1.1 | .6 |
| 8 | 1.9 | 2.3 | 2.4 | 3.4 | 2.9 | 2.95 | 1.15 | .8 | 2.9 | 1.2 | 1.05 | .6 |
| 9 | 1.9 | 2.4 | 2.5 | 3.35 | 2.9 | 3.0 | 1.0 | .95 | 2.75 | 1.15 | 1.0 | .6 |
| 10 | 1.9 | 2.4 | 2.55 | 3.25 | 2.85 | 3.0 | .95 | 1.0 | 2.65 | 1.0 | .95 | .6 |
| 11 | 1.9 | 2.45 | 2.65 | 3.2 | 2.85 | 3.1 | .9 | 1.0 | 2.55 | 1.0 | .9 | .55 |
| 12 | 1.85 | 2.5 | 2.75 | 3.2 | 2.9 | 3.2 | 1.0 | .95 | 2.45 | 1.05 | .85 | .55 |
| 13 | 1.8 | 2.5 | 2.85 | 3.15 | 2.85 | 3.2 | 1.1 | 1.0 | 2.45 | 1.05 | .8 | .55 |
| 14 | 1.85 | 2.5 | 2.95 | 3.1 | 2.9 | 3.2 | 1.0 | 1.0 | 2.5 | 1.1 | .75 | .55 |
| 15 | 1.85 | 2.5 | 3.0 | 3.15 | 2.75 | 3.15 | .9 | 1.1 | 2.5 | 1.05 | .75 | .75 |
| 16 | 1.9 | 2.5 | 3.0 | 3.2 | 2.7 | 3.1 | .75 | 1.25 | 2.55 | 1.0 | .75 | .65 |
| 17 | 1.9 | 2.55 | 2.95 | 3.2 | 2.65 | 3.15 | .7 | 1.6 | 2.65 | 1.0 | .75 | .6 |
| 18 | 1.9 | 2.55 | 2.9 | 3.2 | 2.7 | 3.2 | .65 | 1.9 | 2.5 | 1.35 | .7 | .7 |
| 19 | 1.9 | 2.55 | 2.9 | 3.15 | 2.7 | 3.25 | .6 | 2.0 | 2.4 | 1.85 | .7 | .7 |
| 20 | 1.9 | 2.6 | 2.95 | 3.1 | 2.7 | 3.2 | .7 | 1.9 | 2.3 | 2.25 | .7 | .7 |
| 21 | 1.9 | 2.7 | 3.0 | 3.05 | 2.7 | 2.9 | .7 | 2.0 | 2.2 | 2.45 | .65 | .7 |
| 22 | 1.9 | 3.0 | 3.0 | 3.0 | 2.7 | 2.6 | .7 | 1.95 | 2.0 | 2.3 | .55 | .75 |
| 23 | 1.9 | 3.0 | 3.0 | 3.05 | 2.7 | 2.5 | .75 | 1.95 | 1.85 | 2.8 | .5 | .75 |
| 24 | 2.1 | 2.75 | 3.05 | 3.1 | 2.7 | 2.45 | .7 | 2.0 | 1.75 | 2.85 | .55 | .75 |
| 25 | 2.1 | 2.7 | 3.0 | 3.1 | 2.7 | 2.4 | .65 | 2.2 | 1.65 | 2.5 | .65 | .8 |
| 26 | 2.1 | 2.7 | 3.0 | 3.05 | 2.7 | 2.35 | .7 | 2.4 | 1.5 | 2.25 | 1.2 | .8 |
| 27 | 2.1 | 2.7 | 3.0 | 3.0 | 2.7 | 2.35 | .75 | 2.3 | 1.5 | 2.1 | 1.0 | .75 |
| 28 | 2.1 | 2.6 | 3.0 | 3.0 | 2.7 | 2.4 | .75 | 2.3 | 1.5 | 2.0 | .75 | .75 |
| 29 | 2.1 | 2.6 | 3.25 | 3.0 | ....... | 2.25 | .7 | 2.5 | 1.5 | 2.1 | .7 | .75 |
| 30 | 2.1 | 2.65 | 3.5 | 3.0 | ....... | 2.1 | .7 | 2.65 | 1.5 | 1.9 | .7 | .8 |
| 31 | 2.1 | ....... | 4.0 | 3.0 | ....... | 2.0 | ....... | 2.8 | ....... | 1.7 | .65 | ....... |

*Daily gage height, in feet, of Owens River near Tinemaha, Cal., for 1909–1912—Contd.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 1 | 0.8 | 2.25 | 2.55 | 2.5 | 6.2 | 2.9 | 3.3 | 1.15 | 2.2 | 6.0 | 4.95 | 1.95 |
| 2 | .85 | 2.25 | 2.55 | 2.45 | 6.55 | 2.8 | 3.45 | 1.18 | 2.2 | 6.1 | 4.8 | 1.9 |
| 3 | 1.0 | 2.25 | 2.6 | 2.48 | 5.1 | 2.2 | 3.55 | 1.1 | 2.1 | 6.1 | 4.4 | 1.9 |
| 4 | 1.1 | 2.25 | 2.65 | 2.5 | 4.8 | 2.25 | 3.9 | 1.05 | 2.2 | 6.15 | 4.2 | 1.75 |
| 5 | 1.15 | 2.3 | 2.7 | 2.5 | 4.55 | 2.55 | 4.1 | 1.05 | 2.45 | 6.3 | 3.98 | 1.65 |
| 6 | 1.2 | 2.3 | 2.7 | 2.5 | 4.2 | 2.4 | 4.0 | 1.1 | 2.7 | 6.15 | 3.95 | 1.6 |
| 7 | 1.25 | 2.3 | 2.7 | 2.5 | 3.9 | 2.2 | 3.98 | 1.1 | 2.9 | 6.5 | 3.9 | 1.55 |
| 8 | 1.3 | 2.35 | 2.7 | 2.5 | 3.6 | 2.9 | 4.00 | 1.1 | 3.0 | 6.75 | 3.7 | 1.5 |
| 9 | 1.35 | 2.4 | 2.7 | 2.5 | 3.48 | 4.9 | 3.95 | 1.05 | 3.0 | 7.0 | 3.5 | 1.48 |
| 10 | 1.35 | 2.4 | 2.7 | 3.1 | 3.4 | 5.25 | 3.9 | 1.02 | 3.04 | 7.15 | 3.4 | 1.6 |
| 11 | 1.35 | 2.4 | 2.7 | 2.55 | 3.3 | 5.72 | 3.9 | 1.0 | 3.3 | 7.25 | 3.35 | 1.4 |
| 12 | 1.3 | 2.4 | 2.7 | 3.1 | 3.2 | 4.65 | 3.6 | 1.0 | 3.5 | 7.1 | 3.3 | 1.4 |
| 13 | 1.5 | 2.4 | 2.75 | 2.85 | 3.1 | 4.2 | 3.3 | 1.0 | 3.7 | 6.90 | 3.2 | 1.4 |
| 14 | 1.6 | 2.5 | 2.7 | 2.9 | 3.1 | 4.0 | 3.05 | 1.1 | 4.25 | 6.95 | 3.15 | 1.4 |
| 15 | 1.9 | 2.5 | 2.65 | 2.95 | 3.05 | 3.4 | 3.0 | 1.15 | 4.5 | 7.05 | 3.1 | 1.4 |
| 16 | 2.05 | 2.5 | 2.55 | 2.9 | 3.0 | 3.4 | 3.0 | 1.25 | 4.95 | 7.25 | 3.05 | 1.6 |
| 17 | 2.15 | 2.45 | 2.55 | 2.8 | 2.98 | 3.3 | 2.95 | 1.35 | 5.3 | 7.45 | 3.0 | 1.59 |
| 18 | 2.2 | 2.45 | 2.55 | 2.7 | 3.0 | 3.2 | 2.95 | 1.25 | 5.5 | 7.45 | 2.9 | 1.55 |
| 19 | 2.1 | 2.45 | 2.6 | 2.68 | 3.0 | 3.1 | 2.75 | 1.15 | 5.95 | 7.9 | 2.9 | 1.58 |
| 20 | 2.05 | 2.4 | 2.6 | 2.7 | 3.0 | 3.0 | 2.55 | 1.1 | 6.25 | 7.95 | 2.9 | 1.56 |
| 21 | 2.1 | 2.4 | 2.65 | 2.7 | 3.0 | 3.0 | 2.3 | 1.15 | 6.5 | 7.9 | 2.7 | 1.48 |
| 22 | 2.15 | 2.4 | 2.7 | 2.73 | 2.95 | 2.95 | 2.1 | 1.2 | 6.6 | 7.7 | 2.5 | 1.48 |
| 23 | 2.2 | 2.45 | 2.65 | 2.85 | 2.95 | 2.95 | 2.05 | 1.25 | 6.5 | 7.5 | 2.4 | 1.5 |
| 24 | 2.2 | 2.45 | 2.6 | 2.8 | 2.95 | 3.0 | 2.0 | 1.3 | 6.30 | 7.1 | 2.35 | 1.6 |
| 25 | 2.15 | 2.5 | 2.6 | 2.85 | 2.9 | 2.98 | 1.9 | 1.65 | 6.0 | 7.0 | 2.1 | 1.6 |
| 26 | 2.15 | 2.5 | 2.6 | 2.8 | 2.95 | 2.95 | 1.9 | 2.0 | 5.7 | 6.7 | 2.05 | 1.42 |
| 27 | 2.2 | 2.45 | 2.55 | 2.9 | 2.75 | 3.0 | 1.65 | 1.95 | 5.5 | 6.4 | 2.02 | 1.45 |
| 28 | 2.2 | 2.4 | 2.6 | 2.9 | 2.9 | 2.95 | 1.55 | 1.95 | 5.6 | 6.1 | 2.0 | 1.45 |
| 29 | 2.25 | 2.4 | 2.5 | 3.3 | ...... | 3.1 | 1.4 | 1.75 | 5.7 | 5.9 | 2.0 | 2.0 |
| 30 | 2.25 | 2.5 | 2.55 | 4.1 | ...... | 3.1 | 1.2 | 1.4 | 5.9 | 5.5 | 2.0 | 2.25 |
| 31 | 2.25 | ...... | 2.5 | 5.2 | ...... | 3.15 | ...... | 2.0 | ...... | 5.2 | 1.98 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 2.5 | 2.92 | 2.9 | 2.7 | 2.9 | 2.3 | 1.95 | 0.95 | 1.9 |
| 2 | 2.6 | 2.85 | 2.9 | 2.9 | 2.9 | 2.2 | 1.95 | .95 | 2.2 |
| 3 | 2.6 | 2.98 | 2.9 | 2.9 | 2.9 | 2.1 | 1.95 | .75 | 2.5 |
| 4 | 2.6 | 2.98 | 2.98 | 2.7 | 2.9 | 2.0 | 1.95 | .7 | 2.9 |
| 5 | 2.6 | 2.86 | 2.98 | 2.7 | 2.9 | 2.0 | 1.95 | .65 | 3.1 |
| 6 | 2.58 | 2.95 | 2.98 | 2.7 | 2.9 | 2.1 | 1.9 | .6 | 3.0 |
| 7 | 2.56 | 2.92 | 2.98 | 2.9 | 2.9 | 2.2 | 1.9 | .7 | 3.0 |
| 8 | 2.56 | 2.85 | 2.99 | 2.9 | 2.9 | 2.1 | 1.95 | 1.0 | 3.0 |
| 9 | 2.56 | 2.96 | 2.99 | 3.0 | 2.9 | 2.1 | 2.0 | 1.4 | 3.0 |
| 10 | 2.5 | 2.82 | 2.86 | 3.0 | 2.8 | 2.1 | 2.1 | 1.4 | 3.0 |
| 11 | 2.58 | 2.8 | 2.85 | 3.0 | 2.8 | 2.2 | 2.2 | 1.35 | 2.9 |
| 12 | 2.6 | 2.8 | 2.8 | 3.0 | 2.9 | 2.2 | 2.2 | 1.35 | 2.6 |
| 13 | 2.6 | 2.82 | 2.75 | 3.0 | 2.7 | 2.3 | 2.2 | 1.3 | 2.4 |
| 14 | 2.6 | 2.86 | 2.75 | 3.0 | 2.6 | 2.2 | 2.1 | 1.3 | 2.4 |
| 15 | 2.6 | 2.96 | 2.78 | 3.1 | 2.6 | 2.2 | 2.0 | 1.2 | 2.3 |
| 16 | 2.58 | 3.0 | 2.8 | 3.1 | 2.5 | 2.3 | 2.0 | 1.15 | 2.1 |
| 17 | 2.55 | 3.0 | 2.75 | 3.1 | 2.6 | 2.3 | 1.95 | 1.15 | 1.9 |
| 18 | 2.56 | 2.98 | 2.7 | 3.0 | 2.6 | 2.2 | 1.96 | 1.15 | 1.95 |
| 19 | 2.55 | 2.98 | 2.68 | 3.0 | 2.7 | 2.3 | 1.9 | 1.3 | 1.9 |
| 20 | 2.56 | 2.9 | 2.73 | 3.0 | 2.6 | 2.3 | 1.9 | 1.2 | 1.8 |
| 21 | 2.5 | 2.9 | 2.7 | 3.0 | 2.4 | 2.2 | 1.9 | 1.1 | 1.9 |
| 22 | 2.5 | 2.9 | 2.6 | 2.9 | 2.3 | 2.2 | 1.7 | 1.0 | 1.7 |
| 23 | 2.55 | 2.88 | 2.65 | 2.9 | 2.3 | 2.1 | 1.65 | 1.0 | 1.65 |
| 24 | 2.6 | 2.88 | 2.66 | 2.9 | 2.3 | 2.0 | 1.5 | .95 | 1.7 |
| 25 | 2.65 | 2.88 | 2.65 | 2.9 | 2.2 | 2.0 | 1.25 | .95 | 1.7 |
| 26 | 2.63 | 2.9 | 2.68 | 2.9 | 2.2 | 2.0 | 1.15 | 1.0 | 1.6 |
| 27 | 2.6 | 2.95 | 2.68 | 2.9 | 2.2 | 2.0 | 1.05 | 1.25 | 1.5 |
| 28 | 2.7 | 2.9 | 2.70 | 2.9 | 2.3 | 1.95 | 1.0 | 1.4 | 1.4 |
| 29 | 2.8 | 2.88 | 2.72 | 2.8 | 2.3 | 1.9 | 1.0 | 1.4 | 1.3 |
| 30 | 2.8 | 2.88 | 2.75 | 2.8 | ........ | 1.9 | .95 | 1.5 | 1.25 |
| 31 | 2.8 | ........ | 2.7 | 2.8 | ........ | 1.9 | ........ | 1.6 | ........ |

*Rating tables for Owens River near Tinemaha, Cal.*

**October 13 to December 31, 1906.**

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| Feet. | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. |
| [illegible] | [illegible] | [illegible] | 37 | [illegible] | 34 | [illegible] | 24 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 42 | [illegible] | 142 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 14 | [illegible] | 492 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 27 | [illegible] | 18 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 42 | | | | | | |

NOTE.—Table based on [illegible] discharge measurements made during 1906 and is fairly well defined.

**January 1 to December 31, 1907.**

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1,131 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 91 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1,347 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1,465 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 815 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |

NOTE.—Table applicable only to open channel. It is based on [illegible] discharge measurements made during 1907 and is fairly well defined.

**January 1 to December 31, 1908.**

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 346 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 619 |
| [illegible] | [illegible] | [illegible] | 191 | [illegible] | [illegible] | [illegible] | 646 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 413 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 702 |
| [illegible] | [illegible] | [illegible] | 246 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 102 | [illegible] | 264 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 284 | [illegible] | 513 | | |
| [illegible] | [illegible] | [illegible] | 304 | [illegible] | [illegible] | | |
| [illegible] | 142 | [illegible] | 325 | [illegible] | [illegible] | | |

NOTE.—Table applicable only to open channel. It is based on [illegible] discharge measurements made during 1908 and is well defined.

*Daily discharge, in second-feet, of Owens River near Tinemaha, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 499 | 495 | 451 | 398 | 107 | 279 | 1,520 | 440 | 298 |
| 2 | 499 | 484 | 451 | 398 | 100 | 279 | 1,500 | 408 | 315 |
| 3 | 419 | 462 | 451 | 388 | 94 | 346 | 1,400 | 377 | 298 |
| 4 | 440 | 462 | 440 | 398 | 94 | 449 | 1,550 | 356 | 243 |
| 5 | 462 | 473 | 419 | 408 | 94 | 574 | 1,410 | 346 | 227 |
| 6 | 506 | 506 | 419 | 430 | 94 | 722 | 1,680 | 335 | 227 |
| 7 | 550 | 529 | 419 | 395 | 94 | 984 | 1,520 | 315 | 227 |
| 8 | 574 | 574 | 419 | 366 | 83 | 1,000 | 1,340 | 297 | 219 |
| 9 | 622 | 566 | 408 | 346 | 94 | 940 | 1,150 | 288 | 211 |
| 10 | 644 | 610 | [illegible] | 377 | 107 | 912 | 940 | 279 | 203 |
| 11 | 590 | 622 | 377 | 377 | 121 | 926 | 900 | 279 | 203 |
| 12 | 574 | 640 | 377 | 366 | 142 | 774 | 956 | 279 | 195 |
| 13 | 590 | 740 | 366 | 377 | 163 | 900 | 912 | 279 | 196 |
| 14 | 677 | 574 | 366 | 356 | 211 | 956 | 970 | 270 | 195 |
| 15 | 683 | 610 | 366 | 377 | 187 | 912 | 955 | 261 | 195 |
| 16 | 794 | 622 | 366 | 366 | 163 | 955 | 940 | 261 | 195 |
| 17 | 666 | 590 | 377 | 346 | 163 | 985 | 926 | 252 | 195 |
| 18 | 650 | 574 | 366 | 315 | 156 | 1,000 | 912 | 243 | 195 |
| 19 | 622 | 562 | 356 | 315 | 135 | 1,030 | 856 | 243 | 195 |
| 20 | 590 | 550 | 356 | 315 | 121 | 926 | 800 | 243 | 195 |
| 21 | 900 | 529 | 366 | 288 | 100 | 886 | 748 | 252 | 195 |
| 22 | 912 | 506 | 377 | 261 | 94 | 984 | 670 | 261 | 195 |
| 23 | 912 | 484 | 388 | 235 | 107 | 912 | 634 | 279 | 195 |
| 24 | 774 | 484 | 398 | 219 | 128 | 985 | 634 | 297 | 195 |
| 25 | 696 | 484 | 398 | 196 | 156 | 1,080 | 646 | 297 | 195 |
| 26 | 622 | 452 | 408 | 163 | 187 | 1,240 | 646 | 261 | 195 |
| 27 | 566 | 462 | 419 | 142 | 203 | 1,380 | 634 | 235 | 203 |
| 28 | 550 | 451 | 408 | 128 | 219 | 1,450 | 586 | 227 | 211 |
| 29 | 529 | | 398 | 135 | 227 | 1,500 | 550 | 219 | 219 |
| 30 | 506 | | 388 | 121 | 243 | 1,520 | 528 | 235 | 219 |
| 31 | 506 | | 388 | | 270 | | 484 | 261 | |

*Daily discharge, in second-feet, of Owens River near Tinemaha, Cal., for 1909–1912*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 211 | 356 | 473 | 910 | 524 | 491 | 234 | 125 | 547 | 241 | 250 | 102 |
| 2 | 211 | 356 | 462 | 1,120 | 491 | 502 | 315 | 125 | 618 | 241 | 232 | 102 |
| 3 | 227 | 356 | 462 | 1,220 | 480 | 513 | 286 | 118 | 618 | 223 | 214 | 102 |
| 4 | 261 | 356 | 451 | 920 | 458 | 513 | 277 | 118 | 618 | 205 | 196 | 102 |
| 5 | 288 | 356 | 440 | 679 | 491 | 502 | 250 | 110 | 630 | 196 | 188 | 102 |
| 6 | 297 | 356 | 430 | 666 | 524 | 513 | 232 | 110 | 547 | 196 | 171 | 96 |
| 7 | 315 | 377 | 419 | 679 | 524 | 524 | 205 | 110 | 547 | 196 | 171 | 96 |
| 8 | 315 | 398 | 419 | 642 | 504 | 536 | 180 | 125 | 524 | 188 | 163 | 96 |
| 9 | 315 | 419 | 440 | 630 | 504 | 547 | 155 | 148 | 491 | 180 | 155 | 96 |
| 10 | 315 | 419 | 451 | 606 | 513 | 547 | 148 | 155 | 480 | 155 | 148 | 96 |
| 11 | 315 | 430 | 473 | 504 | 513 | 570 | 140 | 155 | 447 | 155 | 140 | 98 |
| 12 | 306 | 440 | 495 | 504 | 524 | 504 | 155 | 148 | 428 | 163 | 132 | 98 |
| 13 | 297 | 440 | 517 | 582 | 513 | 504 | 171 | 155 | 428 | 163 | 125 | 98 |
| 14 | 306 | 440 | 539 | 570 | 502 | 504 | 155 | 156 | 436 | 171 | 118 | 98 |
| 15 | 306 | 440 | 550 | 582 | 491 | 502 | 140 | 171 | 436 | 163 | 118 | 118 |
| 16 | 315 | 440 | 550 | 504 | 480 | 570 | 118 | 196 | 447 | 156 | 118 | 102 |
| 17 | 315 | 451 | 539 | 504 | 480 | 582 | 110 | 250 | 480 | 155 | 118 | 96 |
| 18 | 315 | 451 | 528 | 504 | 480 | 504 | 102 | 315 | 436 | 214 | 110 | 110 |
| 19 | 315 | 451 | 528 | 582 | 480 | 606 | 96 | 324 | 415 | 306 | 110 | 110 |
| 20 | 315 | 462 | 539 | 570 | 480 | 504 | 110 | 315 | 394 | 394 | 110 | 110 |
| 21 | 315 | 484 | 550 | 558 | 480 | 524 | 110 | 324 | 373 | 426 | 102 | 110 |
| 22 | 315 | 550 | 550 | 547 | 480 | 458 | 110 | 324 | 334 | 394 | 98 | 118 |
| 23 | 315 | 550 | 550 | 558 | 480 | 436 | 118 | 324 | 306 | 502 | 92 | 118 |
| 24 | 356 | 495 | 562 | 570 | 480 | 426 | 110 | 324 | 296 | 513 | 98 | 118 |
| 25 | 356 | 484 | 550 | 570 | 480 | 415 | 102 | 373 | 268 | 536 | 102 | 132 |
| 26 | 356 | 484 | 550 | 558 | 480 | 306 | 110 | 415 | 241 | 394 | 188 | 125 |
| 27 | 356 | 484 | 550 | 547 | 480 | 306 | 118 | 304 | 241 | 353 | 155 | 118 |
| 28 | 356 | 462 | 550 | 547 | 480 | 415 | 118 | 304 | 241 | 324 | 118 | 118 |
| 29 | 356 | 462 | 610 | 547 | ....... | 394 | 110 | 436 | 241 | 353 | 110 | 118 |
| 30 | 356 | 473 | 670 | 547 | ....... | 353 | 110 | 480 | 241 | 315 | 110 | 125 |
| 31 | 356 | ....... | 800 | 547 | ....... | 334 | ....... | 502 | ..... | 277 | 102 | ..... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 125 | 384 | 447 | 410 | 1,420 | 480 | 565 | 172 | 353 | 1,350 | 965 | 306 |
| 2 | 132 | 384 | 447 | 400 | 1,540 | 510 | 622 | 178 | 353 | 1,390 | 920 | 286 |
| 3 | 155 | 384 | 458 | 406 | 1,040 | 540 | 448 | 165 | 334 | 1,390 | 960 | 279 |
| 4 | 171 | 384 | 469 | 410 | 990 | 560 | 710 | 158 | 353 | 1,400 | 910 | 270 |
| 5 | 180 | 394 | 480 | 410 | 965 | 648 | 795 | 158 | 480 | 1,420 | 735 | 252 |
| 6 | 188 | 394 | 480 | 410 | 910 | 610 | 780 | 165 | 450 | 1,490 | 722 | 244 |
| 7 | 196 | 394 | 480 | 410 | 735 | 540 | 735 | 165 | 470 | 1,520 | 710 | 238 |
| 8 | 205 | 404 | 490 | 410 | 660 | 710 | 780 | 165 | 510 | 1,610 | 665 | 227 |
| 9 | 214 | 415 | 490 | 410 | 630 | 1,010 | 748 | 158 | 510 | 1,700 | 635 | 224 |
| 10 | 214 | 415 | 480 | 535 | 610 | 1,120 | 735 | 155 | 520 | 1,750 | 610 | 244 |
| 11 | 214 | 415 | 480 | 648 | 565 | 1,280 | 710 | 152 | 565 | 1,790 | 598 | 244 |
| 12 | 205 | 415 | 490 | 535 | 540 | 935 | 660 | 152 | 635 | 1,740 | 565 | 244 |
| 13 | 241 | 415 | 491 | 522 | 535 | 910 | 565 | 152 | 685 | 1,660 | 540 | 244 |
| 14 | 259 | 436 | 480 | 490 | 535 | 760 | 522 | 165 | 922 | 1,660 | 548 | 244 |
| 15 | 315 | 436 | 469 | 500 | 522 | 660 | 510 | 172 | 900 | 1,720 | 535 | 244 |
| 16 | 344 | 436 | 447 | 480 | 510 | 610 | 510 | 196 | 995 | 1,790 | 522 | 244 |
| 17 | 363 | 426 | 447 | 470 | 506 | 565 | 500 | 202 | 1,130 | 1,860 | 510 | 241 |
| 18 | 373 | 426 | 447 | 450 | 510 | 540 | 500 | 196 | 1,190 | 1,920 | 490 | 236 |
| 19 | 353 | 426 | 458 | 446 | 510 | 535 | 460 | 172 | 1,300 | 1,960 | 470 | 241 |
| 20 | 344 | 415 | 458 | 450 | 510 | 510 | 420 | 165 | 1,440 | 2,000 | 470 | 236 |
| 21 | 363 | 415 | 469 | 450 | 510 | 510 | 372 | 172 | 1,520 | 1,950 | 450 | 224 |
| 22 | 363 | 415 | 490 | 460 | 500 | 500 | 334 | 179 | 1,560 | 1,940 | 410 | 215 |
| 23 | 373 | 426 | 469 | 480 | 500 | 500 | 324 | 196 | 1,520 | 1,990 | 391 | 227 |
| 24 | 373 | 426 | 458 | 470 | 500 | 510 | 315 | 194 | 1,490 | 1,740 | 342 | 244 |
| 25 | 363 | 436 | 458 | 480 | 490 | 506 | 296 | 252 | 1,350 | 1,700 | 334 | 244 |
| 26 | 363 | 436 | 458 | 470 | 480 | 500 | 279 | 315 | 1,250 | 1,600 | 324 | 249 |
| 27 | 373 | 426 | 447 | 470 | 460 | 510 | 252 | 306 | 1,190 | 1,490 | 321 | 252 |
| 28 | 373 | 415 | 458 | 470 | 470 | 522 | 236 | 287 | 1,220 | 1,390 | 315 | 252 |
| 29 | 384 | 415 | 436 | 565 | ....... | 535 | 210 | 270 | 1,250 | 1,320 | 315 | 315 |
| 30 | 384 | 436 | 447 | 785 | ....... | 535 | 179 | 210 | 1,320 | 1,190 | 315 | 362 |
| 31 | 384 | ....... | 436 | 1,100 | ....... | 548 | ....... | 315 | ....... | 1,100 | 311 | ....... |

*Daily discharge, in second-feet, of Owens River near Tinemaha, Cal., for 1909–12—Con.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 410 | 474 | 498 | 428 | 450 | 347 | 268 | 137 | 277 |
| 2 | 430 | 490 | 498 | 450 | 450 | 329 | 268 | 125 | [illegible] |
| 3 | 430 | 498 | 490 | 450 | 450 | 311 | 268 | 124 | [illegible] |
| 4 | 430 | 498 | 498 | 428 | 450 | 294 | 268 | [illegible] | [illegible] |
| 5 | 430 | 492 | 498 | 428 | 450 | 294 | 268 | 103 | 517 |
| 6 | 428 | 490 | 498 | 428 | 450 | 311 | 277 | [illegible] | 494 |
| 7 | 420 | 474 | 498 | 450 | 450 | 329 | 277 | 108 | 494 |
| 8 | 420 | 490 | 498 | 472 | 450 | 311 | 286 | 143 | 494 |
| 9 | 420 | 490 | 498 | 494 | 450 | 311 | 294 | 197 | 494 |
| 10 | 410 | 474 | 490 | 494 | 450 | 311 | 311 | 137 | 494 |
| 11 | 416 | 470 | 490 | 494 | 450 | 329 | 329 | 190 | 472 |
| 12 | 430 | 470 | 470 | 494 | 450 | 329 | 329 | 190 | [illegible] |
| 13 | 430 | 474 | 490 | 494 | 428 | 347 | 320 | 183 | [illegible] |
| 14 | 430 | 490 | 490 | 494 | 406 | 329 | 311 | 183 | [illegible] |
| 15 | 430 | 500 | 466 | 517 | 406 | 329 | 294 | 169 | 347 |
| 16 | 428 | 510 | 470 | 517 | 386 | 347 | 294 | 162 | 311 |
| 17 | 420 | 510 | 460 | 517 | 406 | 347 | 286 | 162 | 277 |
| 18 | 420 | 506 | 450 | 494 | 406 | 329 | 286 | 162 | 268 |
| 19 | 420 | 498 | 446 | 494 | 428 | 347 | 277 | 183 | 260 |
| 20 | 422 | 490 | 460 | 494 | 406 | 347 | 260 | 169 | 260 |
| 21 | 410 | 490 | 450 | 494 | 366 | 329 | 260 | 158 | 260 |
| 22 | 410 | 490 | 430 | 472 | 347 | 329 | 244 | 143 | 244 |
| 23 | 420 | 486 | 440 | 472 | 347 | 311 | 236 | 143 | 236 |
| 24 | 430 | 486 | 440 | 472 | 347 | 294 | 212 | 137 | 244 |
| 25 | 440 | 486 | 440 | 472 | 329 | 294 | 178 | 137 | 244 |
| 26 | 436 | 490 | 436 | 472 | 329 | 294 | 162 | 143 | 228 |
| 27 | 430 | 500 | 446 | 472 | 329 | 294 | 150 | 176 | 212 |
| 28 | 450 | 490 | 450 | 472 | 347 | 286 | 143 | 197 | 197 |
| 29 | 470 | 486 | 454 | 450 | 347 | 277 | 143 | 197 | 183 |
| 30 | 470 | 486 | 460 | 450 | | 277 | 137 | 212 | 178 |
| 31 | 470 | | 450 | 460 | | 277 | | 228 | |

NOTE.—Daily discharge determined from fairly well-defined rating curves applicable as follows: Jan. 1 to Dec. 31, 1909; Jan. 1 to Dec. 31, 1910; Jan. 1 to Dec. 31, 1911; Jan. 1 to June 30, 1912.

*Monthly discharge of Owens River near Tinemaha, Cal., for 1906–1912.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| **1906.** | | | | | |
| January | 635 | 270 | 436 | 26,800 | |
| February | 443 | 308 | 358 | 19,900 | |
| March | 690 | 277 | 438 | 26,900 | |
| April | 530 | 213 | 388 | 23,100 | |
| May | 285 | 162 | 200 | 12,300 | |
| June | 1,540 | 224 | 729 | 43,400 | |
| July | 2,610 | 1,520 | 2,230 | 137,000 | |
| August | 2,220 | 730 | 1,210 | 74,400 | |
| September | 700 | 352 | 448 | 26,700 | |
| The period | | | | 390,000 | |
| **1906–7.** | | | | | |
| October | 401 | 270 | 330 | 20,300 | |
| November | 470 | 397 | 423 | 25,200 | |
| December | 560 | 443 | 510 | 31,400 | |
| January | 584 | 440 | 500 | 30,700 | B. |
| February | 572 | 410 | 493 | 27,400 | B. |
| March | 1,350 | 400 | 646 | 39,700 | B. |
| April | 538 | 170 | 315 | 18,700 | B. |
| May | 355 | 164 | 264 | 16,200 | B. |
| June | 909 | 355 | 660 | 39,300 | B. |
| July | 1,710 | 942 | 1,280 | 78,600 | B. |
| August | 1,090 | 400 | 698 | 42,900 | B. |
| September | 391 | 278 | 310 | 18,400 | B. |
| The year | 1,710 | 164 | 536 | 389,000 | |

*Monthly discharge of Owens River near [illegible]*

| Month. | Discharge in second-feet. | | | Total in acre-feet. | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1907-8.** | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1908-9.** | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1909-10.** | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| November | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| December | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| January | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| February | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| March | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| April | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| May | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| June | [illegible] | 24 | 424 | [illegible] | B. |
| July | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| August | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| September | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| The year | 1,320 | 82 | 355 | [illegible] | |
| **1910-11.** | | | | | |
| October | [illegible] | 127 | [illegible] | [illegible] | B. |
| November | [illegible] | [illegible] | 415 | 24,700 | B. |
| December | 491 | [illegible] | 404 | [illegible] | B. |
| January | 1,100 | [illegible] | [illegible] | [illegible] | B. |
| February | 1,560 | [illegible] | 661 | [illegible] | A. |
| March | 1,260 | [illegible] | 646 | [illegible] | A. |
| April | 785 | 176 | [illegible] | [illegible] | A. |
| May | 315 | 152 | 194 | 11,900 | B. |
| June | 1,560 | 334 | 920 | 54,700 | A. |
| July | 2,000 | 1,100 | [illegible] | 100,000 | A. |
| August | [illegible] | 311 | 544 | 33,400 | A. |
| September | 362 | 215 | 255 | 15,100 | B. |
| The year | 2,000 | 125 | 584 | 423,000 | |
| **1911-12.** | | | | | |
| October | 470 | 410 | 429 | 26,400 | B. |
| November | 510 | 470 | 486 | 28,900 | B. |
| December | 490 | 430 | 464 | 28,500 | B. |
| January | 517 | 428 | 474 | 29,100 | A. |
| February | 450 | 329 | 406 | 23,400 | A. |
| March | 347 | 277 | 310 | 19,400 | A. |
| April | 329 | 137 | 255 | 15,200 | A. |
| May | 228 | 96 | 160 | 9,840 | A. |
| June | 517 | 170 | 333 | 19,800 | A. |
| The period | | | | 201,000 | |

NOTE.—Estimates of monthly discharge for 1906 are only approximate. Part of the year the station was inaccessible, and daily discharge was determined by interpolating between measurements made at the station and at Citrus. After September the discharge was determined from the rating table.

## OWENS RIVER NEAR LONE PINE, CAL.

This station, which is located at the highway bridge on the road from Lone Pine to the Mount Whitney station on the Nevada & California Railroad, 2½ miles northeast of Lone Pine, in sec. 23, T. 15 S., R. 36 E., was established June 12, 1908.

Water is diverted for irrigation above the station. No important tributaries enter the stream for some distance above the bridge.

The gage is a vertical staff attached to the bridge; its datum has not been changed since the station was established.

Discharge measurements were made from the bridge prior to January 3, 1911, when a car and cable were installed about 1,000 feet below the bridge.

Both banks are low and overflow at flood stages. The channel is sandy but fairly permanent. The record may be considered good.

*Discharge measurements of Owens River near Lone Pine, Cal., in 1908-1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1908. | | *Feet.* | *Sec.-ft.* |
| May 18 | R. B. Post | | 53 |
| 27 | do | | 54 |
| June 3 | do | | 49 |
| July 23 | W. A. Lamb | 4.0 | 146 |
| Aug. 7 | do | 5.7 | 436 |
| 9 | do | 5.95 | 483 |
| 18 | do | 4.45 | 220 |
| Sept. 10 | do | 3.52 | 80 |
| 25 | do | 4.26 | 180 |
| Oct. 18 | do | 4.75 | 255 |
| 28 | A. T. Barrows | 5.3 | 355 |
| Nov. 21 | do | 5.5 | 381 |
| 1909. | | | |
| Jan. 27 | R. E. Haines | 7.23 | 752 |
| Feb. 17 | do | 7.38 | 761 |
| Mar. 4 | do | 6.00 | 482 |
| 24 | do | 5.60 | 393 |
| Apr. 14 | do | 5.35 | 366 |
| May 5 | do | 3.73 | 88.4 |
| 24 | do | 3.74 | 101 |
| June 16 | do | 8.20 | 964 |
| July 7 | do | 10.55 | 2,000 |
| 28 | do | 7.10 | 752 |
| Aug. 17 | do | 4.65 | 249 |
| Sept. 13 | do | 4.50 | 213 |
| Oct. 6 | do | 4.80 | 262 |
| 22 | do | 5.20 | 325 |
| Nov. 10 | do | 5.80 | 450 |
| 1910. | | | |
| Mar. 2 | R. E. Haines | 6.35 | 606 |
| 22 | do | 6.50 | 637 |
| Apr. 12 | do | 4.25 | 175 |
| May 5 | do | 3.90 | 129 |
| 24 | do | 4.85 | 306 |
| June 28 | C. H. Lee | 4.53 | 217 |
| July 21 | do | 4.92 | 285 |
| Aug. 16 | F. G. Wood | 3.68 | 87 |
| 26 | G. T. Peekema | 3.53 | 76 |
| Sept. 3 | F. G. Wood | 3.69 | 85 |
| 22 | G. T. Peekema | 3.70 | 91 |
| Oct. 27 | do | 5.25 | 325 |
| Nov. 30 | do | 5.70 | 392 |
| 1911. | | | |
| Jan. 3 | G. T. Peekema | 5.75 | 421 |
| Feb. 2 | do | 8.92 | 1,080 |
| 3 | do | 9.80 | 1,380 |
| 5 | do | 9.28 | 1,150 |
| 5 | do | 9.15 | 1,100 |
| 6 | do | 8.80 | 1,030 |
| 7 | do | 8.48 | 937 |
| 9 | do | 7.78 | 779 |
| 10 | do | 7.48 | 709 |
| 11 | do | 7.27 | 686 |
| 12 | do | 7.07 | 618 |
| 13 | do | 6.98 | 618 |
| Mar. 20 | C. H. Lee | 6.63 | 580 |
| May 15 | do | 4.07 | 136 |
| June 30 | do | 9.62 | 1,190 |
| Aug. 28 | J. E. Jones | 5.02 | 320 |
| Sept. 25 | do | 4.55 | 239 |
| Oct. 30 | do | 6.00 | 478 |
| Nov. 27 | do | 6.44 | 543 |
| Dec. 17 | do | 6.25 | 489 |
| 1912. | | | |
| Jan. 20 | J. E. Jones | 6.45 | 519 |
| Feb. 27 | do | 5.54 | 382 |
| Mar. 15 | do | 5.57 | 376 |
| Apr. 1 | do | 5.10 | 307 |
| 20 | do | 5.08 | 296 |
| May 13 | do | 4.22 | 162 |
| 20 | do | 4.12 | 146 |
| June 15 | do | 5.37 | 333 |

*Daily gage height, in feet, of Owens River near Lone Pine, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1909.** | | | | | | | | | |
| 1 | 5.7 | 6.45 | 6.1 | 5.65 | 3.9 | 4.8 | 10.2 | 8.15 | 5.0 |
| 2 | 5.8 | 6.3 | 6.05 | 5.6 | 3.8 | 4.8 | 10.25 | 7.0 | 4.95 |
| 3 | 5.8 | 6.3 | 6.0 | 5.55 | 3.75 | 4.85 | 10.5 | 5.7 | 5.0 |
| 4 | 5.8 | 6.25 | 6.0 | 5.55 | 3.7 | 5.25 | 10.35 | 5.55 | 4.9 |
| 5 | 5.8 | 6.2 | 5.95 | 5.55 | 3.7 | 5.85 | 10.4 | 5.45 | 4.8 |
| 6 | 5.85 | 6.2 | 6.0 | 5.5 | 3.7 | 5.9 | 10.45 | 5.35 | 4.65 |
| 7 | 5.9 | 6.2 | 6.0 | 5.7 | 3.65 | 6.45 | 10.6 | 5.2 | 4.65 |
| 8 | 5.95 | 6.4 | 5.95 | 5.6 | 3.6 | 7.4 | 10.5 | 5.1 | 4.6 |
| 9 | 6.0 | 6.9 | 5.95 | 5.45 | 3.6 | 7.9 | 10.0 | 5.0 | 4.65 |
| 10 | 6.3 | 7.4 | 5.95 | 5.45 | 3.6 | 8.2 | 9.5 | 4.85 | 4.7 |
| 11 | 6.4 | 7.4 | 5.95 | 5.45 | 3.6 | 8.35 | 9.35 | 4.9 | 4.6 |
| 12 | 6.45 | 7.6 | 5.8 | 5.45 | 3.65 | 8.25 | 8.8 | 4.85 | 4.6 |
| 13 | 6.5 | 7.6 | 5.7 | 5.5 | 3.9 | 8.1 | 8.35 | 4.8 | 4.5 |
| 14 | 6.45 | 7.7 | 5.7 | 5.4 | 4.0 | 7.9 | 8.5 | 4.75 | 4.45 |
| 15 | 6.6 | 7.9 | 5.7 | 5.3 | 4.0 | 8.0 | 8.4 | 4.7 | 4.4 |
| 16 | 6.7 | 7.3 | 5.65 | 5.4 | 4.0 | 8.2 | 8.6 | 4.7 | 4.3 |
| 17 | 6.75 | 7.2 | 5.65 | 5.3 | 4.05 | 8.35 | 8.5 | 4.65 | 4.35 |
| 18 | 7.5 | 7.2 | 5.6 | 5.3 | 4.05 | 8.5 | 8.65 | 4.75 | 4.4 |
| 19 | 7.3 | 7.1 | 5.55 | 5.2 | 4.2 | 8.7 | 8.5 | 4.65 | 4.4 |
| 20 | 6.95 | 7.0 | 5.55 | 5.1 | 4.1 | 8.8 | 8.4 | 4.5 | 4.4 |
| 21 | 6.95 | 6.8 | 5.55 | 5.0 | 3.9 | 8.9 | 8.5 | 4.5 | 4.4 |
| 22 | 7.0 | 6.7 | 5.55 | 4.9 | 3.9 | 8.5 | 8.2 | 4.5 | 4.35 |
| 23 | 7.7 | 6.5 | 5.5 | 4.8 | 3.8 | 8.35 | 7.85 | 4.55 | 4.3 |
| 24 | 8.2 | 6.4 | 5.5 | 4.7 | 3.8 | 8.35 | 7.2 | 4.7 | 4.3 |
| 25 | 8.35 | 6.4 | 5.6 | 4.6 | 3.9 | 8.5 | 7.1 | 5.0 | 4.3 |
| 26 | 7.6 | 6.35 | 5.65 | 4.5 | 4.0 | 8.9 | 7.0 | 4.85 | 4.25 |
| 27 | 6.95 | 6.3 | 5.7 | 4.3 | 4.1 | 9.3 | 6.9 | 4.75 | 4.3 |
| 28 | 6.9 | 6.2 | 5.8 | 4.2 | 4.2 | 9.5 | 7.0 | 4.75 | 4.35 |
| 29 | 6.8 | ........ | 5.85 | 4.1 | 4.4 | 9.85 | 7.1 | 4.7 | 4.4 |
| 30 | 6.7 | ........ | 5.75 | 4.1 | 4.55 | 10.2 | 8.4 | 4.65 | 4.4 |
| 31 | 6.55 | ........ | 5.7 | ........ | 4.7 | ........ | 8.65 | 4.7 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 1 | 4.4 | 5.6 | 6.3 | 7.5 | 6.1 | 5.95 | 5.1 | 3.9 | 5.5 | 4.45 | 4.4 | 3.7 |
| 2 | 4.35 | 5.6 | 6.2 | 7.7 | 5.9 | 6.0 | 5.0 | 3.9 | 5.4 | 4.45 | 4.25 | 3.7 |
| 3 | 4.4 | 5.6 | 6.2 | 8.5 | 6.0 | 6.0 | 5.0 | 3.95 | 6.0 | 4.45 | 4.25 | 3.75 |
| 4 | 4.55 | 5.6 | 6.1 | 9.1 | 6.2 | 6.1 | 5.1 | 3.4 | 6.1 | 4.5 | 4.4 | 3.7 |
| 5 | 4.7 | 5.65 | 6.1 | 10.2 | 6.3 | 6.15 | 5.0 | 3.95 | 6.2 | 4.5 | 4.35 | 3.7 |
| 6 | 4.8 | 5.65 | 6.0 | 9.7 | 6.4 | 6.2 | 5.0 | 3.85 | 6.5 | 4.5 | 4.1 | 3.7 |
| 7 | 5.0 | 5.65 | 6.0 | 9.2 | 6.5 | 6.2 | 4.9 | 3.85 | 6.4 | 4.55 | 4.1 | 3.7 |
| 8 | 5.1 | 5.7 | 6.1 | 8.1 | 6.5 | 6.3 | 4.8 | 4.0 | 6.2 | 4.5 | 4.0 | 3.7 |
| 9 | 5.2 | 5.7 | 6.2 | 7.3 | 6.4 | 6.35 | 4.7 | 4.0 | 6.1 | 4.45 | 3.9 | 3.65 |
| 10 | 5.2 | 5.75 | 6.4 | 7.3 | 6.1 | 6.4 | 4.5 | 4.45 | 5.4 | 4.45 | 3.85 | 3.7 |
| 11 | 5.1 | 5.9 | 4.5 | 7.3 | 6.0 | 6.45 | 4.3 | 4.1 | 5.8 | 4.4 | 3.8 | 3.7 |
| 12 | 5.1 | 6.0 | 4.5 | 7.2 | 6.1 | 6.45 | 4.3 | 4.05 | 5.5 | 4.4 | 3.45 | 3.65 |
| 13 | 5.1 | 6.1 | 4.55 | 7.1 | 6.1 | 6.45 | 4.1 | 4.0 | 5.45 | 4.2 | 3.55 | 3.6 |
| 14 | 5.15 | 6.15 | 4.6 | 7.0 | 6.2 | 6.5 | 4.1 | 4.0 | 5.4 | 4.1 | 3.6 | 3.65 |
| 15 | 5.2 | 6.1 | 4.6 | 7.0 | 6.3 | 6.5 | 4.1 | 4.0 | 5.4 | 4.0 | 3.65 | 3.75 |
| 16 | 5.3 | 6.1 | 4.6 | 7.0 | 6.5 | 6.5 | 4.05 | 3.95 | 5.4 | 4.0 | 3.6 | 3.65 |
| 17 | 5.3 | 6.05 | 4.5 | 7.05 | 6.5 | 6.5 | 4.05 | 4.0 | 5.5 | 4.0 | 3.6 | 3.65 |
| 18 | 5.3 | 6.0 | 4.5 | 7.1 | 6.5 | 6.55 | 4.0 | 4.1 | 5.5 | 3.95 | 3.55 | 3.6 |
| 19 | 5.25 | 6.0 | 4.4 | 7.05 | 6.4 | 6.5 | 4.1 | 4.2 | 5.4 | 4.1 | 3.6 | 3.65 |
| 20 | 5.35 | 6.1 | 4.4 | 7.0 | 6.3 | 6.5 | 4.0 | 4.6 | 5.4 | 4.2 | 3.65 | 3.7 |
| 21 | 5.35 | 6.1 | 4.4 | 7.0 | 6.2 | 6.5 | 4.0 | 4.9 | 5.6 | 4.5 | 3.6 | 3.75 |
| 22 | 5.4 | 6.1 | 4.35 | 7.0 | 6.1 | 6.5 | 4.0 | 4.9 | 5.2 | 4.9 | 3.65 | 3.7 |
| 23 | 5.4 | 6.2 | 4.3 | 6.95 | 6.1 | 6.2 | 3.9 | 4.95 | 5.0 | 5.0 | 3.6 | 3.75 |
| 24 | 5.45 | 6.3 | 4.3 | 6.9 | 6.1 | 5.9 | 3.9 | 4.9 | 4.8 | 5.2 | 3.55 | 3.75 |
| 25 | 5.5 | 6.5 | 4.3 | 6.9 | 6.05 | 5.9 | 3.9 | 5.0 | 4.7 | 5.4 | 3.55 | 3.75 |
| 26 | 5.55 | 6.5 | 4.2 | 6.85 | 6.0 | 5.8 | 3.9 | 5.0 | 4.5 | 5.6 | 3.6 | 3.8 |
| 27 | 5.6 | 6.4 | 4.1 | 6.85 | 6.0 | 5.8 | 3.9 | 5.1 | 4.5 | 5.0 | 3.6 | 3.8 |
| 28 | 5.6 | 6.4 | 4.3 | 6.8 | 6.0 | 5.8 | 3.9 | 5.1 | 4.45 | 5.0 | 3.6 | 3.8 |
| 29 | 5.6 | 6.3 | 5.0 | 6.8 | ........ | 5.8 | 3.9 | 5.2 | 4.4 | 4.9 | 3.6 | 3.75 |
| 30 | 5.6 | 6.3 | 5.0 | 6.7 | ........ | 5.6 | 3.9 | 5.3 | 4.4 | 4.5 | 3.65 | 3.8 |
| 31 | 5.6 | ........ | 5.7 | 6.7 | ........ | 5.4 | ... | 5.4 | ... | 4.45 | 3.7 | ...... |

*Daily discharge, in second-feet, of [illegible] for 1910-11 — [illegible]*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11 | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | 05 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | 52 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 15 | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | ... | [illegible] | [illegible] | ... | [illegible] | ... | [illegible] | ... | [illegible] | [illegible] | ... |

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12 | | | | | | | | | |
| 1 | [illegible] | 470 | 540 | 455 | 491 | 317 | 284 | 159 | 159 |
| 2 | [illegible] | 480 | 540 | 455 | 473 | 334 | 284 | 159 | 189 |
| 3 | [illegible] | [illegible] | 540 | 455 | 473 | 351 | 284 | 144 | 252 |
| 4 | [illegible] | 500 | 540 | 455 | 473 | 351 | 284 | 130 | 317 |
| 5 | [illegible] | [illegible] | 540 | 455 | 491 | 351 | 368 | 130 | 284 |
| 6 | 422 | [illegible] | 540 | 455 | 491 | 334 | 368 | 130 | 402 |
| 7 | 422 | [illegible] | 540 | 455 | 473 | 334 | 368 | 130 | 455 |
| 8 | 422 | 520 | 540 | 473 | 455 | 317 | 284 | 130 | 437 |
| 9 | [illegible] | 520 | 540 | 491 | 455 | 334 | 317 | 103 | 455 |
| 10 | 415 | 520 | 540 | 527 | 455 | 351 | 317 | 130 | 455 |
| 11 | 415 | 510 | 530 | 527 | 455 | 351 | 351 | 159 | 455 |
| 12 | 415 | 510 | 530 | 527 | 455 | 351 | 351 | 174 | 509 |
| 13 | 422 | 500 | 530 | 527 | 455 | 368 | 351 | 159 | 419 |
| 14 | 430 | 510 | 530 | 527 | 455 | 368 | 351 | 159 | 368 |
| 15 | 438 | 520 | 520 | 527 | 455 | 368 | 334 | 144 | 351 |
| 16 | 445 | 540 | 520 | 545 | 368 | 368 | 317 | 130 | 300 |
| 17 | 445 | 540 | 520 | 564 | 351 | 368 | 317 | 130 | 284 |
| 18 | 445 | 550 | 520 | 564 | 334 | 351 | 317 | 130 | 252 |
| 19 | 438 | 550 | 510 | 564 | 368 | 347 | 317 | 144 | 252 |
| 20 | 438 | 560 | 510 | 564 | 368 | 342 | 300 | 144 | 236 |
| 21 | 438 | 550 | 500 | 545 | 368 | 338 | 284 | 159 | 204 |
| 22 | 430 | 540 | 500 | 527 | 351 | 334 | 284 | 159 | 204 |
| 23 | 438 | 540 | 500 | 527 | 351 | 334 | 284 | 144 | 204 |
| 24 | 438 | 540 | 490 | 527 | 351 | 334 | 252 | 130 | 204 |
| 25 | 438 | 540 | 490 | 527 | 351 | 351 | 252 | 130 | 189 |
| 26 | 445 | 540 | 490 | 509 | 351 | 351 | 220 | 130 | 189 |
| 27 | 452 | 540 | 480 | 509 | 351 | 334 | 204 | 130 | 189 |
| 28 | 445 | 540 | 480 | 509 | 334 | 334 | 189 | 130 | 174 |
| 29 | 445 | 540 | 470 | 509 | 317 | 334 | 189 | 144 | 174 |
| 30 | 452 | 540 | 460 | 491 | ........ | 351 | 159 | 159 | 174 |
| 31 | 460 | ........ | 460 | 491 | ........ | 351 | ........ | 159 | ........ |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1, 1909, to Dec. 31, [illegible], well defined between [illegible] and 940 second-feet; Jan. 1, 1910, to Dec. 31, 1910, fairly well defined; Jan. 1, [illegible], to July 21, 1911, fairly well defined; July 22, 1911, to Dec. 31, 1911, fairly well defined; Jan. 1, 1912, to [illegible] 30, 1912, well defined.

*Monthly discharge of Owens River near Lone Pine, Cal., for 1909-1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1909.** | | | | | |
| January | 1,030 | 422 | 425 | 26,400 | A. |
| February | 913 | 522 | 663 | 37,300 | A. |
| March | 502 | 396 | 437 | 27,900 | A. |
| April | 422 | 146 | 322 | 19,200 | A. |
| May | 244 | 75 | 123 | 7,560 | B. |
| June | 1,770 | 290 | 946 | 56,400 | A. |
| July | 2,060 | 574 | 1,220 | 75,000 | B. |
| August | 512 | 212 | 288 | 17,700 | A. |
| September | 256 | 172 | 216 | 12,900 | A. |
| The period | | | | 280,000 | |
| **1909-10.** | | | | | |
| October | 403 | 146 | 329 | 20,200 | A. |
| November | 544 | 403 | 482 | 28,700 | A. |
| December | 542 | 144 | 313 | 19,200 | A |
| January | 1,770 | 627 | 660 | 40,200 | A. |
| February | 542 | 402 | 522 | 29,000 | A. |
| March | 593 | 267 | 344 | 21,100 | B |
| April | 314 | 121 | 196 | 11,700 | A. |
| May | 360 | 107 | 190 | 12,000 | B. |
| June | 542 | 107 | 373 | 22,200 | A. |
| July | 405 | 129 | 221 | 13,600 | A. |
| August | 197 | 74 | 110 | 6,760 | A. |
| September | 107 | 80 | 94.2 | 5,610 | A. |
| The year | 1,770 | 74 | 345 | 240,000 | |
| **1910-11.** | | | | | |
| October | 318 | 147 | 252 | 15,600 | A |
| November | 434 | 270 | 410 | 24,300 | A. |
| December | 490 | 424 | 473 | 29,100 | B. |
| January | 650 | 340 | 470 | 28,900 | B. |
| February | 1,340 | 400 | 622 | 34,500 | A. |
| March | 1,220 | 400 | 624 | 38,400 | A. |
| April | 770 | 186 | 446 | 26,500 | A |
| May | 280 | 100 | 139 | 8,550 | B. |
| June | 1,440 | 280 | 802 | 47,700 | A. |
| July | 1,660 | 1,220 | 1,460 | 90,000 | A. |
| August | 1,280 | 226 | 527 | 32,400 | A. |
| September | 284 | 220 | 236 | 14,000 | B. |
| The year | 1,660 | 100 | 547 | 396,000 | |
| **1911-12.** | | | | | |
| October | 460 | 226 | 429 | 26,200 | B. |
| November | 540 | 470 | 525 | 31,200 | A. |
| December | 540 | 460 | 514 | 31,600 | A. |
| January | 594 | 425 | 500 | 31,300 | A. |
| February | 491 | 317 | 411 | 23,600 | A. |
| March | 394 | 257 | 345 | 21,200 | A. |
| April | 351 | 170 | 282 | 16,800 | A. |
| May | 174 | 103 | 142 | 8,720 | A. |
| June | 500 | 170 | 291 | 17,300 | A |
| The period | | | | 206,000 | |

## OWENS RIVER NEAR CITRUS, CAL.

This station was established October 30, 1903, by R. S. Hawley. It was located at the county bridge, 4 miles east of Independence, Cal., and 1 mile from the Southern Pacific Railroad station at Citrus, Cal. The station at this point shows the amount of waste water which is discharged into Owens Lake. The gage was a vertical staff nailed to a pile on the upstream side of the middle pier of the bridge.

Discharge measurements were made from the county bridge at which the gage is located. The channel is straight for 200 feet above and for 300 feet below the station. Both banks are high and are not liable to overflow. The bed of the stream is sandy and is liable to shift.

*Discharge measurements of Owens River near Citrus, Cal., in 1903–1906.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| June 27 | J. C. Clausen | ........ | 534 | Sept. 20 | J. S. Evans | 3.15 | 12 |
| Aug. 28 | R. S. Hawley | 2.7 | 8.6 | Nov. 8 | F. R. S. Buttemer | 4.65 | 180 |
| Oct. 30 | .....do | 4.4 | 106 | Dec. 3 | .....do | 5.20 | 290 |
| Dec. 4 | .....do | 5.0 | 215 | 15 | .....do | 5.30 | 282 |
| 1904. | | | | 1906. | | | |
| Jan. 27 | R. S. Hawley | 5.45 | 303 | Jan. 3 | F. R. S. Buttemer | ........ | 283 |
| Apr. 6 | .....do | 5.30 | 298 | 19 | .....do | ........ | 440 |
| May 3 | .....do | 3.65 | 25 | 21 | .....do | ........ | 595 |
| June 9 | .....do | 6.65 | 569 | June 4 | G. R. Shuey | ........ | 214 |
| 24 | .....do | 7.20 | 733 | 16 | .....do | ........ | 586 |
| July 22 | L. M. Barnes | 4.80 | 176 | 26 | .....do | ........ | 1,370 |
| Sept. 12 | R. S. Hawley | 4.10 | 59 | July 1 | .....do | ........ | 1,520 |
| Oct. 9 | Hawley and Taylor | 6.30 | 456 | 8 | .....do | ........ | 2,080 |
| Nov. 4 | R. J. Taylor | 5.90 | 410 | 13 | .....do | ........ | 2,210 |
| Dec. 2 | .....do | 5.80 | 351 | 21 | .....do | ........ | 2,460 |
| | | | | 29 | .....do | ........ | 2,610 |
| 1905. | | | | Aug. 9 | .....do | ........ | 1,160 |
| Feb. 2 | R. J. Taylor | 6.00 | 389 | 17 | .....do | ........ | 1,100 |
| May 29 | J. S. Evans | 3.60 | 61 | Sept. 10 | .....do | ........ | 432 |
| July 21 | .....do | 4.30 | 125 | Oct. 7 | .....do | ........ | 321 |
| Aug. 23 | .....do | 3.00 | 12.1 | | | | |

*Daily gage height, in feet, of Owens River near Citrus, Cal., for 1903–1905.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | | |
| 1 | ...... | 4.48 | 4.95 | 5.35 | 5.35 | 5.45 | 6.15 | 3.55 | 5.25 | 6.6 | 5.1 | 4.6 |
| 2 | ...... | 4.45 | 5.0 | 5.4 | 5.3 | 5.35 | 5.7 | 3.6 | 5.2 | 6.5 | 5.4 | 4.6 |
| 3 | ...... | 4.65 | 4.95 | ...... | 5.25 | 5.15 | 5.55 | 3.65 | 5.1 | 6.45 | 5.5 | 4.55 |
| 4 | ...... | 4.7 | 5.0 | 5.35 | 5.25 | 5.3 | 5.35 | 3.6 | 5.0 | 6.4 | 5.55 | 4.6 |
| 5 | ...... | 4.75 | 5.0 | 5.4 | 5.05 | 5.35 | 5.25 | 3.6 | 5.3 | 6.35 | 5.8 | 4.65 |
| 6 | ...... | 4.7 | 5.0 | 5.4 | 5.05 | 5.25 | 5.3 | 3.55 | 5.8 | 6.3 | 5.7 | 4.5 |
| 7 | ...... | 4.6 | 5.0 | 5.4 | 5.0 | 5.15 | 4.9 | 3.55 | 6.2 | 6.2 | 5.7 | ...... |
| 8 | ...... | 4.65 | 5.03 | 5.4 | 5.0 | 5.05 | 4.8 | 3.5 | 6.4 | 6.15 | 5.6 | 4.3 |
| 9 | ...... | 4.7 | 5.03 | 5.4 | 5.0 | 5.05 | 4.75 | 3.5 | 6.5 | 6.2 | 5.85 | 4.25 |
| 10 | ...... | 4.77 | 5.01 | 5.45 | 5.0 | 4.9 | 5.5 | 3.45 | 6.6 | 6.2 | 6.0 | 4.15 |
| 11 | ...... | 4.8 | 5.0 | 5.45 | 5.0 | 4.95 | 5.55 | 3.5 | 6.5 | 6.1 | 6.3 | 4.05 |
| 12 | ...... | 4.83 | 5.01 | 5.4 | 4.9 | 5.0 | 5.4 | 3.4 | 6.4 | 6.1 | 6.2 | 4.05 |
| 13 | ...... | 4.85 | 5.01 | 5.4 | 4.85 | 5.3 | 5.35 | 3.45 | 6.4 | 6.0 | 5.9 | 4.05 |
| 14 | ...... | 4.85 | 5.2 | 5.4 | 4.9 | 5.1 | 5.3 | 3.45 | 6.4 | 5.8 | 5.9 | 4.1 |
| 15 | ...... | 4.87 | 5.2 | 5.4 | 4.85 | 5.0 | 5.2 | 3.45 | 6.5 | 5.65 | 5.6 | 4.1 |
| 16 | ...... | 4.85 | 5.0 | 5.4 | 4.9 | 5.0 | 5.15 | 3.4 | 6.8 | 5.55 | 5.65 | 4.1 |
| 17 | ...... | 4.85 | 5.2 | 5.4 | 5.45 | 5.2 | 4.15 | 3.4 | 6.8 | 5.4 | 5.6 | 4.1 |
| 18 | ...... | 4.85 | 5.2 | 5.4 | 5.4 | 5.25 | 3.9 | 3.4 | 6.8 | 5.2 | 5.5 | 4.1 |
| 19 | ...... | 4.85 | 5.2 | 5.45 | 5.7 | 5.2 | 3.95 | 3.8 | 7.0 | 5.0 | 5.55 | 4.1 |
| 20 | ...... | 4.88 | 5.2 | 5.4 | 5.7 | 5.15 | 3.9 | 4.1 | 7.3 | 5.0 | 5.6 | 4.1 |
| 21 | ...... | 4.95 | 5.25 | 5.4 | 5.6 | 5.2 | 3.7 | 4.1 | 7.3 | 4.9 | 5.35 | 3.85 |
| 22 | ...... | 4.97 | 5.3 | 5.35 | 5.45 | 5.2 | 3.75 | ·4.1 | 7.3 | 4.8 | 5.2 | 3.75 |
| 23 | ...... | 4.9 | 5.3 | 5.4 | 5.5 | 5.15 | 3.6 | 4.5 | 7.3 | 4.8 | 5.15 | 3.75 |
| 24 | ...... | 4.95 | 5.2 | 5.4 | 5.55 | 5.4 | 3.55 | 4.05 | 7.3 | 4.7 | ...... | 3.75 |
| 25 | ...... | 5.0 | 5.15 | 5.45 | 5.5 | 6.0 | 3.5 | 4.1 | 7.2 | 4.8 | ...... | 3.8 |
| 26 | ...... | 5.0 | 5.15 | 5.4 | 5.75 | 5.95 | 3.45 | 4.8 | 7.2 | 5.0 | ...... | 4.2 |
| 27 | ...... | 5.0 | 5.2 | 5.45 | 5.5 | 5.6 | 3.4 | 4.9 | 7.0 | 4.8 | 5.1 | 5.6 |
| 28 | ...... | 5.0 | 5.2 | 5.4 | 5.7 | 5.8 | 3.4 | 5.5 | 6.8 | 5.2 | ...... | 5.7 |
| 29 | ...... | 5.0 | 5.35 | 5.4 | 5.5 | 5.95 | 3.45 | 5.8 | 6.8 | 5.2 | ...... | 5.75 |
| 30 | 4.4 | 5.0 | 5.35 | 5.35 | ...... | 6.4 | 3.4 | 5.45 | 6.7 | 5.3 | ...... | 5.8 |
| 31 | 4.47 | ...... | 5.35 | 5.4 | ...... | 6.6 | ...... | 5.35 | ...... | 5.1 | ...... | ...... |
| 1904–5. | | | | | | | | | | | | |
| 1 | 5.75 | 5.8 | 5.8 | ...... | ...... | 5.85 | ...... | ...... | ...... | 5.6 | ...... | ...... |
| 2 | 5.8 | 5.7 | 5.85 | ...... | 6.0 | ...... | ...... | ...... | ...... | 5.35 | ...... | ...... |
| 3 | 5.7 | 5.9 | ...... | ...... | 6.8 | ...... | ...... | ...... | ...... | 5.0 | ...... | ...... |
| 4 | 6.0 | 5.9 | 5.9 | ...... | 6.8 | 5.8 | ...... | ...... | ...... | 5.0 | ...... | ...... |
| 5 | 6.0 | 5.9 | 5.9 | ...... | ...... | ...... | ...... | ...... | ...... | 5.0 | ...... | ...... |
| 6 | 6.0 | 5.85 | 5.8 | 5.7 | 6.9 | 5.8 | 5.0 | ...... | ...... | 5.0 | ...... | ...... |
| 7 | 6.0 | 5.85 | 5.85 | 5.65 | 6.8 | ...... | ...... | ...... | ...... | 5.0 | ...... | ...... |
| 8 | 6.5 | 5.9 | 5.8 | 5.65 | 6.85 | 5.75 | ...... | ...... | ...... | 5.5 | ...... | ...... |
| ...... | 6.4 | 5.9 | 5.85 | ...... | 6.8 | 5.45 | ...... | ...... | ...... | 5.1 | ...... | ...... |
| ...... | ...... | 5.85 | 5.85 | ...... | 6.85 | 5.4 | ...... | ...... | ...... | 5.1 | ...... | ...... |

*Daily gage height, in feet, of Owens River near Citrus, Cal., for 1903-1905*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904-5. | | | | | | | | | | | | |
| 11 | 5.9 | 5.85 | 5.8 | ...... | 6.9 | 5.46 | ...... | ...... | ...... | 5.2 | ...... | ...... |
| 12 | 6.1 | 5.85 | 5.8 | ...... | 6.9 | 5.4 | ...... | ...... | ...... | 5.25 | ...... | ...... |
| 13 | 6.2 | 5.8 | 5.8 | ...... | ...... | 5.7 | ...... | ...... | ...... | 5.3 | ...... | ...... |
| 14 | 6.5 | 5.8 | 5.8 | 5.7 | 7.1 | ...... | 4.5 | ...... | ...... | 5.3 | ...... | ...... |
| 15 | 6.5 | 5.8 | 5.8 | 5.8 | 7.15 | 5.8 | ...... | ...... | ...... | 5.3 | ...... | |
| 16 | 6.3 | 5.85 | ...... | ...... | 7.2 | 6.3 | ...... | ...... | ...... | 5.3 | ...... | |
| 17 | 6.4 | 5.8 | ...... | ...... | 7.2 | 6.4 | ...... | ...... | ...... | 5.0 | ...... | 3.1 |
| 18 | 6.3 | 5.75 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 4.8 | ...... | 3.1 |
| 19 | 6.1 | 5.8 | ...... | 5.8 | ...... | ...... | ...... | ...... | ...... | 4.75 | ...... | 3.2 |
| 20 | 6.0 | 5.75 | ...... | 5.9 | ...... | ...... | ...... | ...... | ...... | 4.6 | ...... | 3.3 |
| 21 | ...... | 5.8 | ...... | 5.85 | 5.8 | ...... | ...... | ...... | ...... | 4.4 | ...... | 3.3 |
| 22 | 6.0 | 5.8 | ...... | ...... | 5.8 | ...... | ...... | ...... | ...... | 4.1 | ...... | 3.3 |
| 23 | 6.0 | 5.8 | ...... | 6.0 | 5.8 | ...... | ...... | ...... | 6.0 | 3.5 | ...... | 3.3 |
| 24 | 6.0 | 5.8 | ...... | ...... | ...... | ...... | ...... | ...... | 6.1 | 3.2 | ...... | 3.2 |
| 25 | 6.1 | 5.85 | 5.7 | ...... | ...... | ...... | ...... | ...... | 6.3 | 3.0 | ...... | 3.25 |
| 26 | 5.9 | 5.85 | 5.6 | 6.0 | 5.8 | ...... | ...... | ...... | 6.4 | 2.9 | ...... | 3.3 |
| 27 | 5.8 | 5.8 | 5.65 | 6.0 | ...... | ...... | ...... | ...... | 6.35 | 2.75 | ...... | 3.35 |
| 28 | 5.9 | 5.85 | ...... | ...... | ...... | ...... | ...... | ...... | 6.0 | 2.6 | ...... | 3.4 |
| 29 | 5.9 | 5.8 | ...... | ...... | ...... | ...... | ...... | ...... | 5.6 | 2.5 | ...... | 3.4 |
| 30 | 5.9 | 5.8 | ...... | 5.8 | ...... | ...... | ...... | ...... | 5.6 | ...... | ...... | 3.45 |
| 31 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | 1905. | | | | 1905. | | | |
| 1 | 3.5 | 4.6 | 5.15 | 11 | 3.9 | 4.9 | 5.4 | 21 | 4.4 | 5.0 | 5.4 |
| 2 | 3.45 | 4.65 | 5.2 | 12 | 3.9 | 4.9 | 5.35 | 22 | 4.4 | 5.0 | 5.46 |
| 3 | 3.45 | 4.7 | 5.3 | 13 | 4.0 | 4.9 | 5.4 | 23 | 4.5 | 5.0 | 5.5 |
| 4 | 3.5 | 4.75 | 5.35 | 14 | 4.1 | 4.96 | 5.4 | 24 | 4.5 | 5.0 | 5.5 |
| 5 | 3.55 | 4.8 | 5.35 | 15 | 4.15 | 4.96 | 5.4 | 25 | 4.4 | 5.0 | 5.45 |
| 6 | 3.5 | 4.8 | 5.4 | 16 | 4.15 | 5.0 | 5.4 | 26 | 4.45 | 5.0 | 5.45 |
| 7 | 3.5 | 4.8 | 5.4 | 17 | 4.2 | 5.0 | 5.5 | 27 | 4.5 | 5.0 | 5.4 |
| 8 | 3.6 | 4.85 | 5.35 | 18 | 4.25 | 5.0 | 5.46 | 28 | 4.5 | 5.0 | 5.5 |
| 9 | 2.8 | 4.85 | 5.4 | 19 | 4.3 | 5.0 | 5.4 | 29 | 4.5 | 5.0 | 5.4 |
| 10 | 3.85 | 4.9 | 5.4 | 20 | 4.3 | 5.0 | 5.5 | 30 | 4.55 | 5.0 | 5.45 |
| | | | | | | | | 31 | 4.6 | ...... | 5.46 |

*Rating tables for Owens River near Citrus, Cal.*

**January 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 3.60 | 20 | 4.60 | 150 | 5.60 | 335 | 6.60 | 585 |
| 3.70 | 30 | 4.70 | 165 | 5.70 | 360 | 6.70 | 610 |
| 3.80 | 40 | 4.80 | 190 | 5.80 | 385 | 6.80 | 640 |
| 3.90 | 50 | 4.90 | 195 | 5.90 | 410 | 6.90 | 670 |
| 4.00 | 60 | 5.00 | 210 | 6.00 | 435 | 7.00 | 700 |
| 4.10 | 75 | 5.10 | 230 | 6.10 | 460 | 7.10 | 730 |
| 4.20 | 90 | 5.20 | 250 | 6.20 | 485 | 7.20 | 760 |
| 4.30 | 105 | 5.30 | 270 | 6.30 | 510 | 7.30 | 790 |
| 4.40 | 120 | 5.40 | 290 | 6.40 | 535 | 7.40 | 820 |
| 4.50 | 135 | 5.50 | 310 | 6.50 | 560 | | |

**January 1 to December 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.50 | 0 | 3.70 | 63 | 4.90 | 217 | 6.10 | 440 |
| 2.60 | 1 | 3.80 | 73 | 5.00 | 233 | 6.20 | 462 |
| 2.70 | 3 | 3.90 | 83 | 5.10 | 249 | 6.30 | 485 |
| 2.80 | 5 | 4.00 | 94 | 5.20 | 266 | 6.40 | 508 |
| 2.90 | 8 | 4.10 | 105 | 5.30 | 283 | 6.50 | 532 |
| 3.00 | 12 | 4.20 | 117 | 5.40 | 301 | 6.60 | 556 |
| 3.10 | 18 | 4.30 | 130 | 5.50 | 319 | 6.70 | 581 |
| 3.20 | 24 | 4.40 | 144 | 5.60 | 337 | 6.80 | 607 |
| 3.30 | 31 | 4.50 | 158 | 5.70 | 356 | 6.90 | 634 |
| 3.40 | 38 | 4.60 | 172 | 5.80 | 376 | 7.00 | 662 |
| 3.50 | 46 | 4.70 | 187 | 5.90 | 397 | 7.10 | 690 |
| 3.60 | 54 | 4.80 | 202 | 6.00 | 418 | 7.20 | 720 |

NOTE.—Table based on 11 discharge measurements made during 1904-5; fairly well defined between gage heights 3 feet and 7 feet.

*Monthly discharge of Owens River near Citrus, Cal., for 1904–5.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1904.** | | | | |
| January | 400 | 290 | 290.[illegible] | 17.[illegible] |
| February | [illegible] | 157 | 267.[illegible] | 15,[illegible] |
| March | [illegible] | 195 | 299.[illegible] | 17,[illegible] |
| April | 472 | 2 | 160.[illegible] | [illegible] |
| May | 285 | 2 | 76.[illegible] | 4,[illegible] |
| June | [illegible] | 210 | 572.5 | 34,[illegible] |
| July | [illegible] | 165 | 350 | 21,[illegible] |
| August | [illegible] | 230 | 318 | 19,[illegible] |
| September | 285 | 35 | 125 | 7,[illegible] |
| The period | | | | 144,[illegible] |
| **1904–5.** | | | | |
| October | [illegible] | 388 | 451 | 27,[illegible] |
| November | [illegible] | 360 | 388 | 23,[illegible] |
| December | [illegible] | 335 | 378 | 23,[illegible] |
| January | [illegible] | 283 | 389 | [illegible] |
| February | [illegible] | 376 | 540 | 29,[illegible] |
| March 1–17 | [illegible] | 301 | 372 | 12,[illegible] |
| June 23–30 | [illegible] | 337 | 430 | [illegible] |
| July | [illegible] | 0 | 175 | 10,[illegible] |
| September 27–30 | [illegible] | 18 | 29.9 | [illegible] |
| **1905.** | | | | |
| October | 72 | 42 | 107 | 6,579 |
| November | [illegible] | 172 | 219 | 13,[illegible] |
| December | [illegible] | 292 | 301 | 18,510 |

NOTE.—Daily discharge interpolated for days on which the gage was not read.

## ROCK CREEK NEAR ROUND VALLEY, CAL.

This station, which is located at a footbridge on the Bishop and Long Valley road about two-thirds of a mile above the mouth of Pine Creek and 2 miles northwest of Round Valley, in sec. 9, T. 6 S., R. 31 E., was established August 3, 1903, at the wagon bridge 400 feet farther upstream, and was removed to the present site in July, 1906.

Pine Creek, the principal tributary of Rock Creek, enters below the station. A number of small ditches divert water above the station. The drainage area above the mouth of Rock Creek canyon is approximately 46 square miles.

The gage is a vertical staff on the left bank.

Discharge measurements are made from the footbridge.

The channel is composed of sand and bowlders and shifts somewhat.

*Discharge measurements of Rock Creek near [illegible] in 1903–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* |
| Aug. 3 | R. S. Hawley | [illegible] | [illegible] |
| 8 | do | [illegible] | [illegible] |
| 18 | do | [illegible] | [illegible] |
| Sept. 1 | do | [illegible] | [illegible] |
| 10 | do | [illegible] | [illegible] |
| Nov. 24 | do | [illegible] | [illegible] |
| Dec. 29 | do | [illegible] | [illegible] |
| 1904. | | | |
| Mar. 4 | R. S. Hawley | [illegible] | [illegible] |
| 28 | do | [illegible] | [illegible] |
| Apr. 8 | Murphy, Bennett, and Hawley. | [illegible] | [illegible] |
| 27 | R. S. Hawley | [illegible] | [illegible] |
| June 2 | do | [illegible] | [illegible] |
| 15 | do | [illegible] | [illegible] |
| July 13 | Clausen and Barnes | [illegible] | [illegible] |
| Aug. 3 | L. M. Barnes | [illegible] | [illegible] |
| Sept. 9 | R. S. Hawley | [illegible] | [illegible] |
| Oct. 13 | Clapp, Taylor, and Hawley. | [illegible] | [illegible] |
| Nov. 12 | R. J. Taylor | [illegible] | [illegible] |
| Dec. 6 | do | [illegible] | [illegible] |
| 1905. | | | |
| Jan. 16 | R. J. Taylor | [illegible] | [illegible] |
| Feb. 9 | do | [illegible] | [illegible] |
| Apr. 4 | J. S. Evans | [illegible] | [illegible] |
| 25 | do | [illegible] | [illegible] |
| May 24 | do | [illegible] | [illegible] |
| June 27 | do | [illegible] | [illegible] |
| July 25 | do | [illegible] | [illegible] |
| Aug. 15 | do | [illegible] | [illegible] |
| Sept. 8 | do | [illegible] | [illegible] |
| 27 | do | [illegible] | [illegible] |
| Nov. 2 | F. R. S. Buttemer | [illegible] | [illegible] |
| 24 | do | [illegible] | [illegible] |
| Dec. 10 | do | [illegible] | [illegible] |
| 1906. | | | |
| Jan. 8 | F. R. S. Buttemer | 1.58 | [illegible] |
| 14 | do | 1.93 | 41 |
| Aug. 27 | R. S. Hawley | 1.75 | [illegible] |
| Nov. 3 | G. R. Shuey | 1.55 | 37 |
| 30 | do | 1.70 | 47 |
| 1907. | | | |
| Jan. 24 | G. R. Shuey | 1.75 | 44 |
| Feb. 11 | do | 1.50 | [illegible] |
| Mar. 12 | do | 1.23 | 23 |
| Apr. 26 | do | 1.60 | 42 |
| May 15 | do | 1.85 | 54 |
| 30 | do | 2.40 | 84 |
| July 3 | do | 3.10 | 132 |
| 24 | do | 2.90 | 122 |
| Aug. 4 | Shuey and Post | 2.80 | 107 |
| 8 | R. B. Post | 2.40 | 85 |
| 24 | do | 1.95 | 50 |
| Sept. 7 | do | 1.75 | 47 |
| 23 | do | 1.50 | 33 |
| Oct. 5 | do | 1.55 | 35 |
| 28 | do | 1.85 | 54 |
| Nov. 17 | do | 1.65 | 39 |
| Dec. 8 | do | 1.50 | 33 |
| 1908. | | *Feet.* | *Sec.-ft.* |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Sept. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| Nov. [illegible] | do | [illegible] | [illegible] |
| [illegible] | Barrows and Lee | [illegible] | [illegible] |
| 1909. | | | |
| [illegible] | Barrows and Lee | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Mar. [illegible] | do | [illegible] | [illegible] |
| Apr. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| May [illegible] | do | [illegible] | [illegible] |
| June [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Aug. [illegible] | do | [illegible] | [illegible] |
| Sept. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Nov. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| 1910. | | | |
| Mar. [illegible] | R. E. [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Apr. [illegible] | do | [illegible] | [illegible] |
| May [illegible] | do | [illegible] | [illegible] |
| June [illegible] | C. H. Lee | [illegible] | [illegible] |
| July [illegible] | do | [illegible] | [illegible] |
| Aug. [illegible] | do | [illegible] | [illegible] |
| [illegible] | F. [illegible] Wood | [illegible] | [illegible] |
| Sept. [illegible] | G. T. Peekema | [illegible] | 23 |
| Oct. [illegible] | do | [illegible] | [illegible] |
| Nov. [illegible] | do | [illegible] | [illegible] |
| Dec. [illegible] | do | 1.33 | 30 |
| 1911. | | | |
| Jan. [illegible] | G. T. Peekema | [illegible] | [illegible] |
| Mar. [illegible] | C. H. Lee | [illegible] | 33 |
| May [illegible] | do | [illegible] | 32 |
| June 24 | do | [illegible] | [illegible] |
| July [illegible] | do | 3.19 | 162 |
| [illegible] | do | [illegible] | 164 |
| Aug. 2 | J. E. Jones | [illegible] | [illegible] |
| 23 | do | [illegible] | 49 |
| Sept. [illegible] | do | 1.33 | [illegible] |
| Oct. 24 | do | 1.44 | [illegible] |
| Nov. 22 | do | 1.39 | 35 |
| Dec. 12 | do | 1.40 | 37 |
| 1912. | | | |
| Jan. [illegible] | J. E. Jones | 1.45 | [illegible] |
| Feb. 21 | do | 1.22 | 30 |
| Mar. 21 | do | 1.03 | 22 |
| Apr. 16 | do | 1.05 | 24 |
| May 9 | do | 1.05 | 23 |
| 22 | do | 1.10 | 24 |
| June 12 | do | 1.77 | 80 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.2 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.2 | 1.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.15 | 1.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.15 | 1.15 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.4 | 1.7 | 1.15 | 1.15 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.5 | 1.6 | 1.15 | 1.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.45 | 1.6 | 1.15 | 1.2 |

* Estimated.

*Daily gage height, in feet, of Rock Creek near Round Valley,* [illegible]

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904-5.** | | | | | | | | | | | | |
| 21 | 1.9 | 1.65 | 1.45 | 1.7 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | 1.8 | 1.7 | 1.45 | 1.7 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | 1.8 | 1.7 | 1.4 | 1.6 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | 1.8 | 1.6 | 1.35 | 1.6 | 1.45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 1.8 | 1.5 | 1.35 | 1.5 | 1.45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | 1.8 | 1.5 | 1.35 | 1.4 | 1.45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | 1.8 | 1.5 | 1.4 | 1.4 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 1.8 | 1.5 | 1.4 | 1.4 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 1.8 | 1.5 | 1.4 | 1.4 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 1.75 | 1.5 | 1.5 | 1.3 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | 1.75 | ...... | 1.75 | 1.3 | | [illegible] | | [illegible] | | [illegible] | [illegible] | |
| **1905-6.** | | | | | | | | | | | | |
| 1 | 1.2 | 1.3 | 1.6 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 1.2 | 1.3 | 1.6 | 1.45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 1.2 | 1.3 | 1.65 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 1.25 | 1.3 | 1.65 | 1.5 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 1.25 | 1.3 | 1.65 | 1.6 | 1.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | 1.25 | 1.3 | 1.65 | 1.7 | 1.45 | [illegible] | 1.45 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 7 | 1.25 | 1.3 | 1.65 | 1.65 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 8 | 1.25 | 1.25 | 1.65 | 1.6 | 1.4 | [illegible] | 1.4 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 9 | 1.25 | 1.25 | 1.65 | 1.6 | 1.45 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 10 | 1.25 | 1.25 | 1.6 | 1.65 | 1.45 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 11 | 1.2 | 1.2 | 1.6 | 1.75 | 1.45 | 1.4 | 1.4 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 12 | 1.2 | 1.2 | 1.6 | [illegible] | 1.45 | [illegible] | 1.4 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 13 | 1.2 | 1.25 | 1.6 | [illegible] | 1.45 | [illegible] | 1.45 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 14 | 1.2 | 1.3 | 1.6 | [illegible] | 1.45 | [illegible] | 1.4 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 15 | 1.25 | 1.3 | 1.6 | 2.6 | 1.4 | 2.4 | 1.3 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 16 | 1.25 | 1.3 | 1.6 | [illegible] | 1.4 | 2.7 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 17 | 1.3 | 1.3 | 1.6 | [illegible] | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 18 | 1.3 | 1.3 | 1.6 | [illegible] | 1.4 | [illegible] | 1.25 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 19 | 1.3 | 1.3 | 1.6 | 4.2 | 1.4 | [illegible] | 1.25 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 20 | 1.3 | 1.3 | 1.6 | 1.4 | 1.4 | [illegible] | 1.2 | 2.4 | [illegible] | | [illegible] | [illegible] |
| 21 | 1.3 | 1.35 | 1.55 | 1.5 | 1.4 | [illegible] | 1.2 | 2.4 | [illegible] | | [illegible] | 1.6 |
| 22 | 1.3 | 1.3 | 1.55 | 1.6 | 1.4 | [illegible] | 1.2 | [illegible] | [illegible] | | [illegible] | 1.55 |
| 23 | 1.3 | 1.4 | 1.55 | 1.7 | 1.4 | [illegible] | 1.2 | [illegible] | [illegible] | | [illegible] | 1.5 |
| 24 | 1.3 | 1.45 | 1.5 | 1.7 | 1.4 | [illegible] | 1.2 | [illegible] | [illegible] | | [illegible] | 1.5 |
| 25 | 1.3 | 1.5 | 1.5 | 1.6 | 1.35 | 1.55 | [illegible] | [illegible] | [illegible] | | [illegible] | 1.5 |
| 26 | 1.3 | 1.5 | 1.55 | 1.55 | 1.35 | 1.4 | [illegible] | [illegible] | [illegible] | | [illegible] | 1.55 |
| 27 | 1.25 | 1.55 | 1.6 | 1.5 | 1.35 | 1.5 | [illegible] | [illegible] | [illegible] | | [illegible] | 1.55 |
| 28 | 1.25 | 1.6 | 1.6 | 1.5 | 1.35 | 1.4 | [illegible] | [illegible] | [illegible] | | [illegible] | 1.6 |
| 29 | 1.25 | 1.6 | 1.6 | 1.55 | ...... | 1.4 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | 1.6 |
| 30 | 1.25 | 1.55 | 1.6 | 1.55 | ... | 1.4 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | 1.55 |
| 31 | 1.25 | ...... | 1.55 | 1.55 | ... | 1.3 | .. | [illegible] | | [illegible] | [illegible] | .. |
| **1906-7.** | | | | | | | | | | | | |
| 1 | 1.55 | 1.6 | 1.7 | 1.6 | 1.6 | 1.45 | 1.55 | 1.65 | 3.0 | 3.9 | 2.8 | 1.7 |
| 2 | 1.55 | 1.6 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 1.65 | 3.2 | 3.8 | 2.8 | 1.7 |
| 3 | 1.55 | 1.6 | 1.75 | 1.55 | 1.6 | 1.5 | 1.5 | 1.7 | 3.2 | 3.8 | 2.8 | 1.7 |
| 4 | 1.55 | 1.6 | 1.75 | 1.55 | 1.55 | 1.8 | 1.5 | 1.7 | 3.2 | 3.8 | 2.7 | 1.75 |
| 5 | 1.55 | 1.65 | 1.8 | 1.5 | 1.55 | 2.1 | 1.45 | 1.75 | 3.1 | 3.9 | 2.6 | 1.75 |
| 6 | 1.55 | 1.65 | 1.8 | 1.5 | 1.56 | 2.0 | 1.4 | 1.75 | 3.0 | 3.8 | 2.6 | 1.75 |
| 7 | 1.55 | 1.65 | 1.8 | 1.56 | 1.55 | 1.6 | 1.35 | 1.8 | 2.9 | 3.85 | 2.6 | 1.75 |
| 8 | 1.55 | 1.65 | 1.8 | 1.6 | 1.6 | 1.55 | 1.3 | 1.85 | 2.8 | 3.85 | 2.55 | 1.75 |
| 9 | 1.56 | 1.65 | 1.8 | 1.65 | 1.6 | 1.5 | 1.35 | 1.9 | 2.6 | 3.85 | 2.5 | 1.75 |
| 10 | 1.55 | 1.65 | 1.75 | 1.65 | 1.65 | 1.5 | 1.4 | 1.9 | 2.5 | 3.9 | 2.4 | 1.7 |
| 11 | 1.5 | 1.65 | 1.7 | 1.7 | 1.65 | 1.5 | 1.4 | 1.9 | 2.5 | 3.9 | 2.35 | 1.7 |
| 12 | 1.5 | 1.65 | 1.65 | 1.7 | 1.6 | 1.2 | 1.45 | 1.95 | 2.5 | 3.9 | 2.3 | 1.7 |
| 13 | 1.5 | 1.65 | 1.6 | 1.7 | 1.6 | 1.2 | 1.45 | 2.0 | 2.3 | 3.9 | 2.25 | 1.65? |
| 14 | 1.55 | 1.65 | 1.55 | 1.7 | 1.6 | 1.25 | 1.5 | 2.1 | 2.2 | 3.9 | 2.25 | 1.65? |
| 15 | 1.55 | 1.65 | 1.5 | 1.7 | 1.6 | 1.4 | 1.5 | 2.1 | 2.0 | 3.85 | 2.3 | 1.6 |
| 16 | 1.56 | 1.65 | 1.5 | 1.7 | 1.6 | 1.4 | 1.5 | 2.1 | 2.0 | 3.8 | 2.3 | 1.6 |
| 17 | 1.55 | 1.65 | 1.55 | 1.7 | 1.55 | 1.8 | 1.5 | 2.15 | 1.9 | 3.8 | 2.4 | 1.95 |
| 18 | 1.55 | 1.65 | 1.6 | 1.75 | 1.55 | 2.1 | 1.5 | 2.2 | 1.8 | 3.8 | 2.35 | 1.95 |
| 19 | 1.55 | 1.65 | 1.6 | 1.75 | 1.5 | 1.9 | 1.5 | 2.2 | 2.0 | 3.6 | 2.3 | 1.7 |
| 20 | 1.6 | 1.65 | 1.6 | 1.7 | 1.5 | 1.8 | 1.5 | 2.3 | 2.0 | 3.4 | 2.25 | 1.7 |
| 21 | 1.6 | 1.6 | 1.6 | 1.65 | 1.5 | 1.9 | 1.5 | 2.3 | 2.5 | 3.3 | 2.2 | 1.65? |
| 22 | 1.6 | 1.5 | 1.6 | 1.65 | 1.5 | 1.7 | 1.5 | 2.35 | 2.5 | 3.0 | 2.2 | 1.6 |
| 23 | 1.55 | 1.45 | 1.6 | 1.65 | 1.5 | 1.7 | 1.5 | 2.4 | 2.6 | 2.8 | 2.15 | 1.5 |
| 24 | 1.5 | 1.45 | 1.6 | 1.65 | 1.45 | 1.65 | 1.5 | 2.45 | 2.6 | 2.6 | 2.1 | 1.5 |
| 25 | 1.5 | 1.5 | 1.6 | 1.65 | 1.4 | 1.65 | 1.5 | 2.5 | 2.4 | 2.6 | 2.0 | 1.5 |

[a] Station discontinued; operations resumed July [illegible].

*Daily gage height, in feet, of Rock Creek near Round Valley, Cal., for 1906-1908—Con.*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 26 | 1.45 | 1.6 | 1.6 | 1.65 | 1.25 | 1.65 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.5 |
| 27 | 1.45 | [illegible] | 1.6 | 1.65 | 1.25 | 1.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 1.45 | 1.75 | 1.6 | 1.65 | 1.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.5 |
| 29 | [illegible] | 1.8 | 1.6 | 1.6 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | 1.8 | 1.6 | 1.6 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.5 |
| 31 | [illegible] | | 1.6 | 1.6 | ...... | [illegible] | ...... | [illegible] | | [illegible] | [illegible] | ...... |
| 1907-8. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | 1.5 | 1.5 | 1.4 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | 1.2 |
| 2 | [illegible] | [illegible] | [illegible] | 1.45 | 1.5 | 1.4 | 1.2 | 1.4 | [illegible] | [illegible] | [illegible] | ...... |
| 3 | [illegible] | [illegible] | 1.4 | 1.45 | 1.45 | 1.4 | 1.2 | [illegible] | [illegible] | ...... | [illegible] | 1.2 |
| 4 | [illegible] | [illegible] | [illegible] | 1.45 | 1.4 | 1.4 | 1.2 | 1.4 | [illegible] | [illegible] | [illegible] | ...... |
| 5 | [illegible] | [illegible] | 1.4 | 1.45 | 1.25 | 1.4 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | 1.25 |
| 6 | [illegible] | [illegible] | 1.7 | 1.5 | 1.3 | 1.4 | 1.2 | 1.5 | 1.4 | [illegible] | [illegible] | 1.2 |
| 7 | [illegible] | [illegible] | [illegible] | 1.5 | 1.3 | 1.4 | 1.2 | 1.6 | 1.4 | [illegible] | [illegible] | ...... |
| 8 | [illegible] | [illegible] | 1.75 | 1.5 | 1.25 | 1.4 | 1.15 | 1.3 | 1.4 | [illegible] | 1.9 | 1.2 |
| 9 | [illegible] | [illegible] | [illegible] | 1.5 | 1.25 | 1.4 | 1.15 | 1.2 | 1.4 | 1.85 | [illegible] | 1.2 |
| 10 | 1.4 | [illegible] | [illegible] | 1.5 | 1.3 | 1.4 | 1.15 | 1.3 | 1.4 | [illegible] | [illegible] | ...... |
| 11 | [illegible] | [illegible] | 1.65 | 1.5 | 1.3 | 1.4 | 1.2 | 1.1 | 1.4 | 1.85 | 2.0 | 1.1 |
| 12 | [illegible] | [illegible] | [illegible] | 1.4 | 1.3 | 1.4 | ...... | 1.1 | 1.3 | 2.0 | 1.9 | 1.15 |
| 13 | [illegible] | [illegible] | [illegible] | 1.35 | 1.35 | 1.4 | ...... | 1.2 | 1.5 | 1.9 | 2.1 | 1.2 |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | 1.4 | 1.35 | 1.0 | 1.1 | 1.3 | 2.0 | 2.0 | ...... |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | 1.4 | 1.35 | 1.0 | 1.3 | 1.4 | 1.8 | 1.8 | 1.35 |
| 16 | [illegible] | [illegible] | [illegible] | 1.15 | 1.4 | 1.35 | 1.0 | 1.2 | 1.45 | 1.7 | 1.9 | ...... |
| 17 | [illegible] | [illegible] | 1.4 | [illegible] | 1.4 | 1.4 | 1.0 | 1.3 | 1.5 | 1.7 | 1.8 | ...... |
| 18 | [illegible] | [illegible] | 1.4 | [illegible] | 1.4 | 1.4 | 1.0 | 1.2 | 1.4 | 1.6 | 1.5 | 1.4 |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | 1.4 | 1.4 | 1.1 | 1.2 | 1.4 | 1.6 | 1.4 | 1.45 |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | 1.35 | 1.35 | 1.1 | 1.3 | 1.4 | 1.5 | 1.3 | ...... |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | 1.35 | 1.3 | 1.1 | 1.3 | 1.5 | 1.4 | 1.2 | 1.3 |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.25 | 1.0 | 1.3 | 1.5 | 1.4 | 1.2 | ...... |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | 1.45 | 1.25 | 1.1 | 1.3 | 1.35 | 1.3 | 1.2 | 1.6 |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | 1.45 | 1.2 | 1.2 | 1.4 | 1.4 | 1.2 | ...... | 1.7 |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.15 | 1.2 | 1.3 | 1.5 | 1.3 | ...... | 1.7 |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.1 | 1.2 | 1.3 | 1.5 | 1.3 | ...... | ...... |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.05 | 1.3 | 1.3 | 1.45 | ...... | 1.2 | 1.6 |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.2 | 1.3 | 1.3 | 1.4 | 1.4 | 1.3 | ...... |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.2 | 1.3 | 1.2 | 1.4 | 1.5 | 1.3 | 1.5 |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | 1.2 | 1.4 | 1.3 | 1.45 | 1.7 | ...... | ...... |
| 31 | [illegible] | | [illegible] | [illegible] | ...... | 1.2 | ...... | 1.3 | ...... | 1.7 | 1.2 | ...... |
| 1908-9. | | | | | | | | | | | | |
| [illegible] | [illegible] | | | | [illegible] | [illegible] | 1.1 | 1.2 | ...... | 3.2 | 1.7 | 1.4 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | ...... | ...... | ...... | 2.5 | 3.4 | 1.6 | ...... |
| [illegible] | | | | | [illegible] | [illegible] | 1.1 | 1.3 | 2.6 | 3.5 | 1.5 | 1.4 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | ...... | ...... | ...... | ...... | ...... | 1.5 | ...... |
| [illegible] | | | | | [illegible] | [illegible] | [illegible] | 1.35 | 2.6 | 3.3 | 1.4 | 1.4 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | ...... | ...... | ...... | ...... | 3.1 | 1.4 | ...... |
| [illegible] | | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.0 | ...... | 1.45 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | ...... | 1.4 | ...... |
| [illegible] | | | | | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 1.4 | 1.45 |
| [illegible] | | [illegible] | [illegible] | [illegible] | | | ...... | [illegible] | [illegible] | ...... | ...... | ...... |
| [illegible] | [illegible] | | | | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 1.35 | 1.5 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | ...... | ...... | ...... | ...... |
| [illegible] | [illegible] | | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.5 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | ...... | ...... | ...... | ...... |
| [illegible] | [illegible] | | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.4 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| [illegible] | [illegible] | | | | | [illegible] | [illegible] | | [illegible] | ...... | [illegible] | 1.6 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | ...... | 1.4 |
| [illegible] | | | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.4 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| [illegible] | | | | | | [illegible] | ...... | | [illegible] | [illegible] | [illegible] | 1.4 |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | ...... | [illegible] | ...... | 1.4 |
| [illegible] | | | | | | [illegible] | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... |
| [illegible] | | [illegible] | [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] | ...... | [illegible] | 1.4 |
| [illegible] | [illegible] | | | | | [illegible] | ...... | ...... | ...... | [illegible] | ...... | ...... |
| [illegible] | | | | | | | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| [illegible] | | | | | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| [illegible] | | [illegible] | | [illegible] | [illegible] | | [illegible] | ...... | ...... | ...... | [illegible] | 1.35 |
| [illegible] | | | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... | ...... |
| [illegible] | | | | [illegible] | | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | | | [illegible] | ...... | [illegible] | ...... | ...... | [illegible] | ...... |

*Daily gage height, in feet, of Rush Creek near Round Valley, Cal., for 1909–1911*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | | | 1.6 | 1.9 | | 1.25 | 1.1 | 1.3 | 2.2 | 2.3 | | 1.35 |
| 2 | 1.35 | 1.2 | | | 1.65 | | | | | | 1.55 | |
| 3 | 1.3 | 1.25 | 1.6 | 1.9 | | 1.4 | 1.15 | 1.3 | 2.3 | 2.1 | | 1.35 |
| 4 | 1.3 | 1.15 | 1.65 | | 1.6 | 1.4 | | | 2.4 | | 1.5 | 1.25 |
| 5 | | | | 1.8 | 1.65 | | 1.1 | 1.25 | 2.3 | 2.15 | 1.5 | |
| 6 | 1.3 | 1.2 | 1.6 | | | 1.25 | 1.15 | | 2.2 | 2.0 | | 1.2 |
| 7 | 1.25 | | | 1.6 | 1.7 | 1.3 | | 1.25 | | | 1.4 | |
| 8 | | 1.1 | 1.6 | | | 1.3 | 1.1 | 1.4 | 2.2 | 2.0 | | 1.1 |
| 9 | 1.3 | 1.25 | | 1.5 | 1.7 | | | | | | 1.25 | |
| 10 | 1.3 | | 1.7 | | | 1.25 | 1.15 | 1.25 | 2.2 | 1.8 | | 1.15 |
| 11 | | 1.3 | | 1.4 | 1.65 | 1.2 | 1.15 | 1.45 | | | 1.4 | 1.1 |
| 12 | 1.3 | 1.3 | 1.7 | | | | | | 2.15 | 1.75 | 1.4 | |
| 13 | 1.3 | | 1.7 | 1.4 | 1.6 | 1.2 | 1.1 | 1.4 | | | | 1.15 |
| 14 | | 1.2 | | | | | | | 2.1 | 1.65 | 1.3 | |
| 15 | 1.25 | | 1.7 | 1.4 | 1.5 | 1.25 | 1.15 | 1.5 | | | | 1.15 |
| 16 | | 1.3 | | | | | 1.1 | 1.5 | 2.0 | 1.65 | 1.3 | |
| 17 | 1.25 | | 1.7 | 1.4 | 1.4 | 1.2 | 1.2 | 1.55 | 2.1 | 1.65 | | 1.15 |
| 18 | | 1.25 | | | 1.4 | | | | 1.9 | | 1.4 | |
| 19 | 1.2 | | 1.7 | 1.5 | | 1.2 | 1.2 | 1.5 | 1.9 | 1.65 | | 1.1 |
| 20 | | 1.35 | | | 1.3 | | | 1.6 | | | 1.4 | |
| 21 | 1.25 | 1.3 | 1.7 | 1.5 | 1.3 | 1.2 | 1.25 | | 1.7 | 1.6 | | 1.1 |
| 22 | | | | | | | 1.2 | 1.6 | 1.7 | | 1.4 | |
| 23 | 1.2 | 1.4 | | 1.55 | 1.3 | 1.2 | | | 1.5 | 1.65 | | 1.0 |
| 24 | 1.15 | 1.4 | 1.7 | | | | 1.3 | 1.7 | 1.4 | | 1.5 | |
| 25 | | 1.45 | | 1.6 | 1.3 | 1.2 | 1.25 | | | 1.6 | | 1.05 |
| 26 | 1.1 | | 1.7 | | | | 1.4 | 1.7 | 1.4 | | 1.4 | |
| 27 | | 1.55 | | 1.55 | 1.3 | 1.2 | 1.35 | 1.6 | 1.45 | 1.65 | | 1.0 |
| 28 | 1.2 | | 1.7 | | 1.35 | | 1.25 | | | 1.6 | 1.35 | |
| 29 | | 1.6 | | 1.6 | | 1.2 | | 1.8 | 1.4 | | | 1.1 |
| 30 | 1.1 | 1.6 | 1.7 | | | | 1.3 | | | 1.65 | 1.25 | 1.1 |
| 31 | 1.2 | | 1.7 | 1.65 | | 1.2 | | 1.9 | | 1.5 | | |
| 1910–11. | | | | | | | | | | | | |
| 1 | 1.15 | 1.4 | 1.35 | 1.35 | 2.1 | 1.35 | 1.5 | 1.3 | 1.8 | | 2.75 | 1.65 |
| 2 | | | | | | | | | | 2.3 | 2.15 | |
| 3 | 1.2 | 1.45 | 1.35 | 1.35 | 1.55 | 1.3 | 1.45 | 1.23 | 1.95 | | 2.7 | 1.6 |
| 4 | | | 1.4 | | | | | | | 2.25 | | 1.5 |
| 5 | 1.2 | 1.4 | | 1.4 | 1.5 | 1.35 | 1.65 | 1.25 | 2.1 | 2.25 | 2.63 | |
| 6 | | 1.4 | 1.4 | | | | | 1.28 | | 2.2 | | 1.45 |
| 7 | 1.2 | | | 1.3 | 1.5 | 1.3 | 1.7 | 1.3 | 2.2 | 2.18 | 2.5 | |
| 8 | | 1.25 | 1.45 | | | | | 1.35 | 2.4 | 2.35 | | 1.45 |
| 9 | 1.2 | | | | 1.45 | 2.8 | 1.5 | | | | 2.43 | |
| 10 | | 1.4 | 1.4 | 1.45 | | 2.2 | | 1.4 | 2.5 | 2.23 | | 1.35 |
| 11 | 1.2 | | 1.45 | | 1.65 | | 1.35 | 1.45 | 2.65 | | 2.45 | |
| 12 | | 1.45 | | 1.45 | | 1.33 | | | | 2.45 | | 1.35 |
| 13 | 1.3 | | 1.4 | | 1.5 | | 1.3 | 1.5 | 2.7 | 2.4 | 2.2 | |
| 14 | 1.4 | 1.4 | | 1.5 | | 1.35 | | 1.55 | 2.2 | | | 1.3 |
| 15 | | | 1.4 | 1.45 | 1.5 | | 1.35 | | | 2.7 | 2.25 | |
| 16 | 1.5 | 1.35 | | | | 1.22 | | 1.65 | 2.5 | 2.5 | | 1.35 |
| 17 | | 1.35 | 1.35 | 1.5 | 1.65 | 1.35 | 1.4 | 1.6 | 2.65 | | 2.1 | |
| 18 | 1.45 | | 1.35 | | | 1.3 | | | 2.7 | 2.3 | 2.15 | 1.3 |
| 19 | | 1.3 | | 1.45 | 1.4 | | 1.35 | 1.75 | 2.7 | | | |
| 20 | 1.5 | | 1.3 | | | 1.22 | | | | 2.15 | 2.0 | 1.33 |
| 21 | 1.4 | 1.35 | | 1.5 | 1.35 | | 1.4 | 1.85 | 2.8 | | | |
| 22 | | | 1.35 | 1.35 | | 1.25 | | 1.9 | | 2.1 | 2.5 | 1.3 |
| 23 | 1.45 | 1.3 | | | 1.35 | 1.3 | 1.35 | | 2.65 | | 1.55 | |
| 24 | | | 1.35 | 1.45 | | 1.35 | | 2.0 | 2.6 | 2.0 | 1.85 | 1.3 |
| 25 | 1.45 | 1.25 | | 1.30 | 1.3 | | 1.43 | | | | | |
| 26 | 1.5 | | 1.4 | 1.5 | 1.35 | 1.4 | | 1.9 | 2.4 | 2.85 | 1.8 | 1.3 |
| 27 | 1.5 | | | 1.5 | | | 1.35 | | | | | |
| 28 | | 1.3 | 1.35 | | 1.3 | 1.45 | | 1.85 | 2.45 | 2.9 | 1.73 | 1.33 |
| 29 | 1.5 | 1.35 | 1.35 | | | | 1.4 | | | | 1.75 | |
| 30 | 1.5 | | | 2.4 | | 1.5 | 1.35 | 1.8 | 2.4 | 2.9 | | 1.25 |
| 31 | 1.5 | | 1.4 | | | 1.45 | | | | | 1.6 | |

*Daily gage height, in feet, of Rock Creek near Round Valley, Cal., for 1908–1912—Con.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | [illegible] | | | [illegible] | [illegible] | | | [illegible] | [illegible] |
| 2 | | [illegible] | [illegible] | | | [illegible] | [illegible] | | |
| 3 | [illegible] | | | [illegible] | [illegible] | | | [illegible] | [illegible] |
| 4 | | | [illegible] | | | [illegible] | [illegible] | | |
| 5 | [illegible] | [illegible] | | [illegible] | [illegible] | | | [illegible] | [illegible] |
| 6 | [illegible] | | [illegible] | | | [illegible] | [illegible] | | |
| 7 | [illegible] | [illegible] | | [illegible] | [illegible] | | | | |
| 8 | [illegible] | | [illegible] | | | [illegible] | [illegible] | | |
| 9 | | [illegible] | | [illegible] | [illegible] | | | [illegible] | [illegible] |
| 10 | [illegible] | | [illegible] | | | [illegible] | [illegible] | | |
| 11 | | [illegible] | | [illegible] | [illegible] | | | [illegible] | [illegible] |
| 12 | [illegible] | | [illegible] | | | [illegible] | [illegible] | | [illegible] |
| 13 | | [illegible] | | [illegible] | [illegible] | | | [illegible] | |
| 14 | [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] | | |
| 15 | [illegible] | [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] | |
| 16 | [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] | | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] |
| 18 | | | | [illegible] | | [illegible] | [illegible] | [illegible] | |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 20 | | | | | | | [illegible] | | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 22 | | [illegible] | | | | | [illegible] | | |
| 23 | [illegible] | | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | | | | [illegible] | | [illegible] |
| 25 | [illegible] | | | [illegible] | [illegible] | [illegible] | | [illegible] | |
| 26 | | [illegible] | | | | | [illegible] | | [illegible] |
| 27 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 28 | | [illegible] | [illegible] | | | | [illegible] | | [illegible] |
| 29 | [illegible] | | | [illegible] | [illegible] | [illegible] | | [illegible] | |
| 30 | | [illegible] | [illegible] | [illegible] | | | [illegible] | | |
| 31 | [illegible] | | | | | [illegible] | | [illegible] | |

*Rating tables for Rock Creek near Round Valley, Cal.*

**August 4, 1908, to February 16, 1909.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| [illegible].40 | 5 | [illegible]0 | 22 | [illegible] | 32 | 2.[illegible]0 | 40 |
| [illegible].40 | 7 | [illegible]0 | 25 | 2.00 | 35 | 2.20 | 44 |
| [illegible].50 | 9 | [illegible] | 28 | | | | |

**February 17 to December 31, 1909.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [illegible].00 | 12 | 1.[illegible]0 | 34 | 2.[illegible]0 | 58 | 2.60 | 93 |
| [illegible].[illegible]0 | 15 | 1.70 | 38 | 2.20 | 63 | 2.70 | 95 |
| [illegible] | 18 | [illegible] | 43 | 2.30 | 69 | 2.80 | 102 |
| [illegible] | 22 | [illegible] | 48 | 2.40 | 75 | 2.90 | 109 |
| [illegible].40 | 26 | 2.00 | 53 | 2.50 | 81 | 3.00 | 116 |
| [illegible] | [illegible] | | | | | | |

**January 1, 1910, to January 19, 1910.**

The daily discharges were obtained by the indirect method for shifting channels.

**January 20 to December 31, 1910.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.00 | 12 | 1.[illegible]0 | 54 | 2.50 | 107 | 3.20 | 163 |
| 1.[illegible]0 | 15 | 1.[illegible]0 | 61 | 2.60 | 115 | 3.30 | 171 |
| 1.[illegible]0 | 19 | 2.00 | 68 | 2.70 | 123 | 3.40 | 179 |
| 1.[illegible]0 | 23 | 2.10 | 75 | 2.80 | 131 | 3.50 | 188 |
| 1.[illegible]0 | 28 | 2.20 | 83 | 2.90 | 139 | 3.60 | 197 |
| [illegible]0 | 34 | 2.30 | 91 | 3.00 | 147 | 3.70 | 206 |
| 1.[illegible]0 | 40 | 2.40 | 99 | 3.10 | 155 | 3.80 | 215 |
| 1.[illegible]0 | 47 | | | | | | |

NOTE.—Table is based on [illegible] discharge measurements made during 1910 and is not well defined. The [illegible] Jan. 1 to 19 gives a much smaller discharge at the same gage height.

*Rating tables for Rock Creek near Round Valley, Cal.*—Continued.

January 1 to December 31, 1907.

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.20 | 22 | 2.00 | 61 | 2.80 | 111 | 3.60 | 167 |
| 1.30 | 26 | 2.10 | 67 | 2.90 | 118 | 3.70 | 174 |
| 1.40 | 30 | 2.20 | 73 | 3.00 | 125 | 3.80 | 181 |
| 1.50 | 34 | 2.30 | 79 | 3.10 | 132 | 3.90 | 188 |
| 1.60 | 39 | 2.40 | 85 | 3.20 | 139 | 4.00 | 195 |
| 1.70 | 44 | 2.50 | 91 | 3.30 | 146 | | |
| 1.80 | 49 | 2.60 | 97 | 3.40 | 153 | | |
| 1.90 | 55 | 2.70 | 104 | 3.50 | 160 | | |

NOTE.—Table applicable only to open channel. It is based on 17 discharge measurements made during 1907. It is fairly well defined between gage heights 1.2 feet and [illegible] feet. Above gage height [illegible] feet the rating curve is a tangent, the difference being 7 per tenth.

*Daily discharge, in second-feet, of Rock Creek near Round Valley, Cal., for 1905 and 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905.[a] | | | | | | | | | | | | |
| 1 | 34 | 36 | 30 | 30 | 30 | 34 | 42 | 24 | 19 | 19 | 20 | 27 |
| 2 | 30 | 30 | 30 | 28 | 28 | 32 | 42 | 24 | 19 | 19 | 20 | 27 |
| 3 | 30 | 30 | 28 | 28 | 21 | 32 | 41 | 24 | 19 | 19 | 20 | 28 |
| 4 | 26 | 25 | 28 | 28 | 20 | 30 | 40 | 23 | 19 | 19 | 20 | 26 |
| 5 | 26 | 26 | 28 | 28 | 30 | 30 | 42 | 23 | 19 | 19 | 20 | 28 |
| 6 | 26 | 26 | 30 | 28 | 18 | 30 | 42 | 21 | 19 | 19 | 20 | 28 |
| 7 | 26 | 28 | 18 | 28 | 18 | 26 | 46 | 23 | 19 | 19 | 20 | 28 |
| 8 | 26 | 21 | 18 | 28 | 18 | 30 | 51 | 22 | 19 | 19 | 19 | 28 |
| 9 | 28 | 20 | 16 | 20 | 19 | 34 | 51 | 26 | 19 | 19 | 19 | 28 |
| 10 | 20 | 20 | 16 | 20 | 19 | 34 | 51 | 26 | 19 | 19 | 19 | 27 |
| 11 | 20 | 20 | 18 | 19 | 19 | 30 | 51 | 23 | 19 | 19 | 19 | 27 |
| 12 | 20 | 28 | 18 | 19 | 20 | 56 | 51 | 21 | 19 | 19 | 19 | 27 |
| 13 | 20 | 28 | 28 | 19 | 20 | 56 | 51 | 21 | 19 | 19 | 19 | 27 |
| 14 | 20 | 28 | 21 | 18 | 20 | 59 | 51 | 20 | 18 | 19 | 20 | 27 |
| 15 | 20 | 28 | 21 | 18 | 20 | 65 | 51 | 20 | 18 | 19 | 20 | 27 |
| 16 | 21 | 24 | 28 | 18 | 20 | 68 | 46 | 18 | 18 | 19 | 20 | 27 |
| 17 | 28 | 26 | 24 | 17 | 34 | 71 | 42 | 18 | 18 | 20 | 20 | 27 |
| 18 | 23 | 23 | 24 | 16 | 44 | 74 | 38 | 18 | 18 | 20 | 20 | 27 |
| 19 | 24 | 28 | 28 | 16 | 44 | 81 | 33 | 18 | 19 | 20 | 20 | 27 |
| 20 | 24 | 28 | 28 | 14 | 44 | 78 | 33 | 16 | 19 | 20 | 20 | 27 |
| 21 | 34 | 28 | 21 | 14 | 30 | 74 | 33 | 18 | 19 | 20 | 20 | 28 |
| 22 | 34 | 26 | 21 | 14 | 30 | 68 | 31 | 18 | 20 | 20 | 21 | 28 |
| 23 | 30 | 28 | 20 | 14 | 36 | 68 | 31 | 18 | 20 | 20 | 22 | 28 |
| 24 | 30 | 24 | 21 | 16 | 36 | 62 | 30 | 17 | 20 | 20 | 23 | 24 |
| 25 | 26 | 24 | 28 | 17 | 34 | 62 | 30 | 17 | 20 | 20 | 24 | 24 |
| 26 | 23 | 24 | 28 | 17 | 34 | 56 | 26 | 17 | 19 | 20 | 24 | 26 |
| 27 | 23 | 28 | 23 | 17 | 36 | 50 | 26 | 17 | 19 | 19 | 26 | 27 |
| 28 | 23 | 23 | 23 | 18 | 44 | 46 | 23 | 17 | 19 | 19 | 27 | 27 |
| 29 | 23 | ...... | 28 | 18 | 30 | 44 | 21 | 17 | 19 | 19 | 27 | 27 |
| 30 | 20 | ...... | 28 | 19 | 30 | 42 | 21 | 18 | 19 | 19 | 26 | 27 |
| 31 | 20 | ...... | 28 | ...... | 36 | ...... | 26 | 18 | ...... | 19 | ...... | 26 |

[a] Owing to shifting conditions the daily discharge has been computed from several curves, each covering a short period of time.

*Daily discharge, in second-feet, of Rock Creek near Round Valley, Cal., for 1905 and 1909–1912*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 22 | 22 | 22 | 23 | 27 | 87 | 159 | 51 | 36 |
| 2 | 22 | 34 | 22 | 20 | 20 | 100 | 164 | 46 | 36 |
| 3 | 22 | 36 | 22 | 20 | 22 | 167 | 172 | 41 | 36 |
| 4 | 22 | 41 | 22 | 19 | 22 | 107 | 164 | 41 | 36 |
| 5 | 43 | 46 | 22 | 18 | 34 | 167 | 157 | 36 | 36 |
| 6 | 57 | 46 | 20 | 18 | 36 | 104 | 143 | 36 | 36 |
| 7 | 54 | 43 | 27 | 18 | 36 | 100 | 135 | 36 | 38 |
| 8 | 51 | 46 | 27 | 19 | 41 | 164 | 135 | 36 | 38 |
| 9 | 49 | 46 | 27 | 19 | 41 | 167 | 114 | 36 | 38 |
| 10 | 46 | 41 | 25 | 19 | 41 | 128 | 107 | 36 | 41 |
| 11 | 49 | 38 | 23 | 19 | 38 | 167 | 100 | 34 | 41 |
| 12 | 51 | 46 | 23 | 19 | 36 | 164 | 94 | 36 | 41 |
| 13 | 51 | 41 | 23 | 19 | 36 | 100 | 90 | 36 | 41 |
| 14 | 51 | 36 | 23 | 19 | 36 | 100 | 87 | 36 | 38 |
| 15 | 46 | 36 | 23 | 19 | 36 | 104 | 87 | 36 | 36 |
| 16 | 41 | 36 | 23 | 19 | 36 | 100 | 87 | 36 | 36 |
| 17 | 43 | 36 | 23 | 19 | 36 | 94 | 84 | 41 | 38 |
| 18 | 46 | 34 | 23 | 23 | 36 | 97 | 81 | 41 | 36 |
| 19 | 46 | 36 | 23 | 27 | 34 | 100 | 87 | 36 | 36 |
| 20 | 46 | 36 | 21 | 27 | 33 | 100 | 81 | 36 | 34 |
| 21 | 43 | 36 | 19 | 27 | 36 | 167 | 74 | 36 | 36 |
| 22 | 41 | 36 | 18 | 25 | 36 | 110 | 68 | 36 | 36 |
| 23 | 38 | 36 | 16 | 23 | 36 | 114 | 68 | 38 | 36 |
| 24 | 36 | 36 | 19 | 23 | 36 | 121 | 65 | 36 | 36 |
| 25 | 34 | 36 | 23 | 27 | 36 | 121 | 63 | 36 | 34 |
| 26 | 22 | 36 | 23 | 23 | 36 | 125 | 63 | 36 | 32 |
| 27 | 46 | 34 | 23 | 27 | 63 | 135 | 63 | 36 | 32 |
| 28 | 22 | 36 | 23 | 25 | 65 | 135 | 60 | 36 | 34 |
| 29 | 22 | ........ | 23 | 23 | 68 | 135 | 57 | 36 | 32 |
| 30 | 22 | ........ | 23 | 23 | 72 | 146 | 60 | 36 | 32 |
| 31 | 22 | ........ | 23 | ........ | 74 | ........ | 63 | 36 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | 32 | 27 | 46 | 63 | 49 | 34 | 23 | 32 | 81 | 87 | 42 | 34 |
| 2 | 34 | 27 | 46 | 63 | 49 | 35 | 24 | 32 | 84 | 80 | 43 | 34 |
| 3 | 32 | 29 | 46 | 63 | 47 | 36 | 26 | 32 | 87 | 74 | 42 | 34 |
| 4 | 32 | 26 | 49 | 60 | 46 | 36 | 24 | 33 | 94 | 76 | 41 | 29 |
| 5 | 32 | 27 | 46 | 57 | 49 | 25 | 23 | 34 | 87 | 78 | 41 | 28 |
| 6 | 32 | 27 | 46 | 52 | 50 | 34 | 26 | 34 | 81 | 68 | 38 | 27 |
| 7 | 34 | 26 | 46 | 46 | 51 | 32 | 24 | 34 | 81 | 68 | 36 | 25 |
| 8 | 32 | 23 | 46 | 44 | 51 | 32 | 23 | 36 | 81 | 68 | 35 | 23 |
| 9 | 32 | 34 | 49 | 41 | 51 | 30 | 24 | 35 | 81 | 62 | 34 | 24 |
| 10 | 32 | 32 | 51 | 38 | 50 | 29 | 26 | 34 | 81 | 57 | 35 | 25 |
| 11 | 32 | 32 | 51 | 36 | 49 | 27 | 25 | 38 | 80 | 56 | 36 | 23 |
| 12 | 32 | 32 | 51 | 36 | 48 | 27 | 24 | 37 | 78 | 54 | 36 | 24 |
| 13 | 32 | 29 | 51 | 36 | 46 | 27 | 23 | 36 | 76 | 52 | 34 | 25 |
| 14 | 32 | 27 | 51 | 36 | 44 | 28 | 24 | 38 | 74 | 49 | 32 | 25 |
| 15 | 29 | 29 | 51 | 36 | 41 | 29 | 25 | 41 | 71 | 49 | 32 | 25 |
| 16 | 29 | 32 | 51 | 36 | 38 | 28 | 23 | 41 | 68 | 49 | 32 | 25 |
| 17 | 29 | 32 | 51 | 36 | 36 | 27 | 27 | 43 | 74 | 49 | 34 | 25 |
| 18 | 27 | 29 | 51 | 38 | 36 | 27 | 27 | 42 | 63 | 49 | 36 | 24 |
| 19 | 27 | 32 | 51 | 41 | 34 | 27 | 27 | 41 | 63 | 49 | 36 | 23 |
| 20 | 27 | 34 | 51 | 41 | 32 | 27 | 28 | 46 | 57 | 47 | 36 | 23 |
| 21 | 29 | 32 | 51 | 41 | 32 | 27 | 29 | 46 | 51 | 46 | 36 | 23 |
| 22 | 27 | 34 | 51 | 42 | 32 | 27 | 27 | 46 | 51 | 48 | 36 | 21 |
| 23 | 27 | 36 | 51 | 43 | 32 | 27 | 30 | 48 | 41 | 49 | 38 | 19 |
| 24 | 26 | 36 | 51 | 44 | 32 | 27 | 32 | 51 | 36 | 47 | 41 | 20 |
| 25 | 23 | 38 | 51 | 46 | 32 | 27 | 34 | 51 | 36 | 46 | 39 | 21 |
| 26 | 23 | 41 | 51 | 46 | 32 | 27 | 36 | 51 | 36 | 48 | 36 | 20 |
| 27 | 26 | 43 | 51 | 43 | 32 | 27 | 34 | 57 | 38 | 49 | 35 | 19 |
| 28 | 27 | 46 | 51 | 44 | 34 | 27 | 34 | 57 | 37 | 46 | 34 | 21 |
| 29 | 26 | 46 | 51 | 46 | ...... | 27 | 33 | 57 | 36 | 47 | 34 | 23 |
| 30 | 23 | 46 | 51 | 48 | ...... | 27 | 32 | 60 | 62 | 49 | 34 | 23 |
| 31 | 27 | ...... | 51 | 49 | ...... | 27 | ...... | 63 | ...... | 41 | 34 | ...... |

*Daily discharge, in second-feet, of Rock Creek near Round Valley, Cal., for 1905 and 1909–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 1 | 25 | 30 | 29 | 30 | 76 | 34 | 41 | 31 | 58 | 170 | 126 | 53 |
| 2 | 26 | 31 | 29 | 30 | 60 | 32 | 40 | 30 | 62 | 166 | 86 | 52 |
| 3 | 27 | 32 | 29 | 30 | 44 | 31 | 38 | 28 | 67 | 164 | 122 | 50 |
| 4 | 27 | 31 | 31 | 31 | 42 | 32 | 44 | 28 | 72 | 162 | 120 | 45 |
| 5 | 27 | 30 | 31 | 32 | 41 | 34 | 49 | 29 | 76 | 162 | 117 | 44 |
| 6 | 27 | 30 | 31 | 30 | 41 | 32 | 50 | 32 | 80 | 158 | 112 | 42 |
| 7 | 27 | 29 | 32 | 28 | 41 | 31 | 52 | 31 | 83 | 156 | 108 | 42 |
| 8 | 27 | 28 | 34 | 30 | 40 | 78 | 46 | 34 | 97 | 162 | 106 | 42 |
| 9 | 27 | 29 | 33 | 32 | 38 | 125 | 41 | 35 | 100 | 161 | 103 | 40 |
| 10 | 27 | 30 | 32 | 34 | 38 | 83 | 38 | 36 | 104 | 160 | 104 | 38 |
| 11 | 27 | 31 | 34 | 34 | 38 | 58 | 34 | 38 | 114 | 190 | 104 | 38 |
| 12 | 30 | 32 | 33 | 34 | 40 | 32 | 32 | 40 | 116 | 178 | 96 | 38 |
| 13 | 32 | 31 | 32 | 35 | 41 | 33 | 31 | 41 | 118 | 174 | 87 | 36 |
| 14 | 36 | 30 | 32 | 36 | 41 | 34 | 32 | 44 | 157 | 186 | 88 | 35 |
| 15 | 38 | 29 | 32 | 34 | 41 | 33 | 34 | 46 | 169 | 198 | 90 | 36 |
| 16 | 40 | 28 | 31 | 35 | 40 | 32 | 35 | 49 | 181 | 182 | 85 | 38 |
| 17 | 37 | 28 | 30 | 36 | 38 | 34 | 36 | 46 | 193 | 174 | 80 | 36 |
| 18 | 35 | 29 | 30 | 35 | 37 | 31 | 35 | 50 | 197 | 166 | 84 | 35 |
| 19 | 36 | 26 | 29 | 34 | 36 | 32 | 34 | 55 | 197 | 160 | 79 | 36 |
| 20 | 36 | 27 | 28 | 35 | 35 | 32 | 35 | 58 | 201 | 154 | 74 | 36 |
| 21 | 30 | 28 | 29 | 36 | 34 | 30 | 36 | 61 | 205 | 152 | 91 | 36 |
| 22 | 35 | 27 | 30 | 30 | 34 | 29 | 35 | 64 | 225 | 150 | 108 | 35 |
| 23 | 32 | 26 | 30 | 32 | 34 | 31 | 34 | 67 | 194 | 146 | 49 | 35 |
| 24 | 32 | 27 | 30 | 34 | 32 | 34 | 36 | 70 | 190 | 143 | 65 | 35 |
| 25 | 32 | 28 | 32 | 36 | 31 | 35 | 38 | 67 | 182 | 142 | 64 | 35 |
| 26 | 34 | 27 | 33 | 36 | 34 | 36 | 36 | 64 | 174 | 140 | 62 | 35 |
| 27 | 34 | 27 | 32 | 36 | 32 | 37 | 34 | 62 | 170 | 138 | 60 | 36 |
| 28 | 34 | 26 | 31 | 80 | 31 | 38 | 35 | 61 | 178 | 136 | 58 | 36 |
| 29 | 34 | 28 | 31 | 126 | ....... | 40 | 36 | 60 | 176 | 136 | 59 | 34 |
| 30 | 34 | 28 | 32 | 166 | ....... | 41 | 34 | 58 | 174 | 136 | 54 | 32 |
| 31 | 34 | ....... | 33 | 121 | ....... | 38 | ....... | 58 | ....... | 131 | 50 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 35 | 40 | 36 | 34 | 36 | 35 | 30 | 17 | 58 |
| 2 | 34 | 41 | 36 | 35 | 38 | 36 | 32 | 17 | 56 |
| 3 | 32 | 40 | 36 | 36 | 39 | 36 | 32 | 17 | 55 |
| 4 | 32 | 39 | 36 | 34 | 39 | 36 | 32 | 19 | 54 |
| 5 | 32 | 38 | 36 | 32 | 39 | 36 | 30 | 21 | 52 |
| 6 | 27 | 38 | 36 | 34 | 39 | 36 | 29 | 21 | 54 |
| 7 | 27 | 38 | 37 | 35 | 39 | 35 | 31 | 21 | 55 |
| 8 | 31 | 40 | 38 | 34 | 39 | 34 | 33 | 21 | 56 |
| 9 | 32 | 41 | 37 | 34 | 39 | 35 | 30 | 23 | 58 |
| 10 | 34 | 40 | 36 | 35 | 39 | 36 | 26 | 22 | 61 |
| 11 | 35 | 38 | 36 | 36 | 39 | 35 | 26 | 22 | 64 |
| 12 | 36 | 40 | 36 | 37 | 39 | 34 | 25 | 24 | 59 |
| 13 | 38 | 41 | 36 | 38 | 39 | 33 | 23 | 27 | 57 |
| 14 | 41 | 40 | 35 | 38 | 39 | 32 | 21 | 28 | 55 |
| 15 | 41 | 38 | 36 | 37 | 39 | 30 | 22 | 30 | 54 |
| 16 | 36 | 38 | 36 | 38 | 38 | 29 | 23 | 33 | 52 |
| 17 | 36 | 38 | 34 | 38 | 36 | 28 | 22 | 36 | 52 |
| 18 | 36 | 37 | 32 | 40 | 35 | 27 | 21 | 42 | 49 |
| 19 | 36 | 36 | 31 | 42 | 34 | 28 | 21 | 38 | 46 |
| 20 | 37 | 36 | 32 | 40 | 32 | 25 | 21 | 34 | 44 |
| 21 | 38 | 36 | 32 | 39 | 30 | 22 | 22 | 30 | 44 |
| 22 | 38 | 36 | 32 | 39 | 32 | 24 | 22 | 25 | 45 |
| 23 | 38 | 36 | 31 | 39 | 34 | 25 | 22 | 34 | 46 |
| 24 | 38 | 35 | 34 | 40 | 34 | 26 | 23 | 36 | 44 |
| 25 | 41 | 36 | 33 | 40 | 34 | 27 | 22 | 38 | 42 |
| 26 | 40 | 36 | 32 | 40 | 34 | 28 | 21 | 40 | 39 |
| 27 | 38 | 36 | 31 | 39 | 34 | 29 | 21 | 42 | 44 |
| 28 | 40 | 36 | 34 | 39 | 34 | 29 | 21 | 42 | 44 |
| 29 | 41 | 36 | 35 | 39 | 34 | 29 | 21 | 42 | 45 |
| 30 | 40 | 36 | 36 | 39 | ....... | 29 | 21 | 45 | 45 |
| 31 | 38 | ....... | 36 | 38 | ....... | 29 | ....... | 48 | ....... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1, 1909, to Oct. 14, 1910, well defined; Oct. 15, 1910, to Dec. 31, 1910, indirect method for shifting channels used; Jan. 1 to 30, 1911, Jan. 31 to June 21, 1911, June 22 to Oct. 5, 1911, Oct. 6, 1911, to Jan. 17, 1912, Jan. 18, 1912, to June 30, 1912. Discharge interpolated for days on which gage was not read.

*Monthly discharge of Rock Creek near Round Valley, Cal., for 1903–1912.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| **1903.** | | | | | |
| August 4–31 | 25 | 17 | 20 | 1,111 | |
| September | 22 | 13 | 18 | 1,071 | |
| **1903–4.** | | | | | |
| October | 17 | 15 | 15 | 922 | |
| November | 19 | 17 | 18 | 1,071 | |
| December | 22 | 18 | 20 | 1,230 | |
| January | 20 | 15 | 17.4 | 1,070 | |
| February | 40 | 15 | 20.5 | 1,179 | |
| March | 34 | 18 | 23.6 | 1,451 | |
| April | 22 | 18 | 21 | 1,250 | |
| May | 102 | 18 | 50 | 3,074 | |
| June | 109 | 75 | 91.7 | 5,456 | |
| July | 98 | 34 | 60.5 | 3,720 | |
| August | 75 | 43 | 59 | 3,6[illegible] | |
| September | 60 | 18 | 29 | 1,725 | |
| The year | 109 | 15 | 35.5 | 25,8[illegible] | |
| **1904–5.** | | | | | |
| October | 60 | 41 | 47 | 2,9[illegible] | |
| November | 41 | 30 | 38 | 2,142 | |
| December | 40 | 24 | 27.7 | 1,703 | |
| January | 34 | 20 | 24.8 | 1,525 | |
| February | 56 | 20 | 24.9 | 1,3[illegible] | |
| March | 26 | 18 | 21.5 | 1,322 | |
| April | 23 | 14 | 18.7 | 1,113 | |
| May | 44 | 18 | 28.8 | 1,771 | |
| June | 91 | 28 | 51.1 | 3,041 | |
| July | 51 | 21 | 38.5 | 2,367 | |
| August | 26 | 17 | 20.1 | 1,2[illegible] | |
| September | 20 | 18 | 19.0 | 1,131 | |
| The year | 91 | 14 | 28.8 | 21,[illegible] | |
| **1905–6.** | | | | | |
| October | 20 | 19 | 19.3 | 1,1[illegible] | |
| November | 27 | 19 | 21.1 | 1,2[illegible] | |
| December | 28 | 24 | 26.9 | 1,654 | |
| January | 200 | 17 | 38.9 | 2,3[illegible] | |
| February | 37 | 25 | 29.7 | 1,6[illegible] | |
| March | 99 | 23 | 45.7 | 2,8[illegible] | |
| April | 37 | 17 | 24.6 | 1,4[illegible] | |
| May | 99 | 19 | 54.2 | 3,3[illegible] | |
| June | 215 | 50 | 145 | 8,6[illegible] | |
| July | 167 | 131 | a 159 | 9,2[illegible] | |
| August | 127 | 61 | 107 | 6,5[illegible] | |
| September | 64 | 34 | 47.4 | 2,8[illegible] | |
| The year | 215 | 17 | 58.1 | [illegible] | |
| **1906–7.** | | | | | |
| October | 40 | 31 | 35.9 | 2,210 | |
| November | 54 | 31 | 42.6 | 2,5[illegible] | |
| December | 54 | 34 | 48.5 | 2,6[illegible] | |
| January | 46 | 34 | 41.1 | 2,5[illegible] | C. |
| February | 42 | 28 | 36.0 | 2,[illegible] | C. |
| March | 67 | 22 | 40.7 | 2,5[illegible] | C. |
| April | 39 | 26 | 33.5 | 1,9[illegible] | C. |
| May | 125 | 42 | 72.6 | 4,4[illegible] | C. |
| June | 196 | 49 | 101 | 6,0[illegible] | C. |
| July | 188 | 97 | 157 | 9,6[illegible] | C. |
| August | 111 | 39 | 77.6 | 4,770 | C. |
| September | 46 | 34 | 40.9 | 2,430 | C. |
| The year | 196 | 22 | 60.2 | 43,9[illegible] | |
| **1907–8.** | | | | | |
| October | 79 | 28 | 44.6 | 2,740 | C. |
| November | 46 | 34 | 41.9 | 2,490 | C. |
| December | 49 | 26 | 33.6 | 2,070 | C. |
| January | 35 | 22 | 29 | 1,780 | D. |
| February | 45 | 24 | 30 | 1,730 | D. |
| March | 30 | 18 | 27 | 1,660 | D. |
| April | 30 | 17 | 22 | 1,310 | D. |

a Mean for 7 days taken as mean for the month.

*Monthly discharge of Rock Creek near Round Valley, Cal., for 1903-1912*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| May | 35 | 17 | 25 | 1,540 | D. |
| June | 35 | 23 | 30 | 1,790 | D. |
| July | 73 | 31 | 52 | 3,200 | D. |
| August | 80 | 31 | 53 | 3,260 | D. |
| September | 49 | 28 | 36 | 2,140 | D. |
| The year | 80 | 17 | 35.3 | 25,700 | |
| **1908-9.** | | | | | |
| October | 31 | 17 | 25 | 1,540 | D. |
| November | 23 | 21 | 22 | 1,310 | D. |
| December | 26 | 23 | 26 | 1,600 | D. |
| January | 57 | 32 | 41.8 | 2,570 | B. |
| February | 46 | 34 | 38.3 | 2,130 | B. |
| March | 32 | 16 | 24.4 | 1,500 | B. |
| April | 29 | 18 | 22.0 | 1,310 | B. |
| May | 74 | 27 | 41.0 | 2,520 | B. |
| June | 146 | 87 | 110 | 6,540 | A. |
| July | 172 | 57 | 97.2 | 5,980 | A. |
| August | 51 | 36 | 37.5 | 2,310 | B. |
| September | 41 | 32 | 36.3 | 2,160 | B. |
| The year | 172 | 16 | 43.5 | 31,500 | |
| **1909-10.** | | | | | |
| October | 34 | 23 | 29.1 | 1,790 | B. |
| November | 46 | 23 | 32.7 | 1,950 | B. |
| December | 51 | 46 | 49.7 | 3,060 | B. |
| January | 63 | 36 | 44.8 | 2,750 | B. |
| February | 51 | 32 | 41.2 | 2,290 | B. |
| March | 36 | 27 | 29.2 | 1,800 | B. |
| April | 36 | 23 | 27.1 | 1,610 | B. |
| May | 63 | 32 | 42.8 | 2,630 | B. |
| June | 94 | 36 | 65.5 | 3,900 | B. |
| July | 87 | 41 | 56.0 | 3,440 | B. |
| August | 43 | 32 | 36.4 | 2,240 | B. |
| September | 34 | 19 | 25.3 | 1,510 | B. |
| The year | 94 | 19 | 40.0 | 29,000 | |
| **1910-11.** | | | | | |
| October | 40 | 25 | 31.6 | 1,940 | B. |
| November | 32 | 26 | 28.8 | 1,710 | C. |
| December | 34 | 28 | 31.1 | 1,910 | C. |
| January | 166 | 28 | 44.7 | 2,750 | B. |
| February | 76 | 31 | 39.6 | 2,200 | B. |
| March | 125 | 29 | 40.4 | 2,480 | B. |
| April | 52 | 31 | 37.7 | 2,240 | B. |
| May | 70 | 28 | 47.5 | 2,920 | B. |
| June | 225 | 58 | 144 | 8,570 | B. |
| July | 198 | 131 | 159 | 9,780 | B. |
| August | 126 | 50 | 86.8 | 5,340 | B. |
| September | 53 | 32 | 38.7 | 2,300 | B. |
| The year | 225 | 25 | 60.8 | 44,100 | |
| **1911-12.** | | | | | |
| October | 41 | 27 | 36.1 | 2,220 | B. |
| November | 41 | 35 | 37.9 | 2,260 | B. |
| December | 38 | 31 | 34.6 | 2,130 | B. |
| January | 42 | 32 | 37.4 | 2,300 | B. |
| February | 39 | 30 | 36.4 | 2,090 | A. |
| March | 36 | 22 | 30.7 | 1,890 | A. |
| April | 33 | 21 | 24.9 | 1,480 | A. |
| May | 48 | 17 | 30.2 | 1,860 | A. |
| June | 64 | 39 | 51.0 | 3,040 | A. |
| The period | ........ | ........ | ........ | 19,300 | |

NOTE.—Discharge for 1908 obtained by the indirect method for shifting channels.

## PINE CREEK NEAR ROUND VALLEY, CAL.

This station, which is located at a footbridge about 300 feet above the highway bridge on the road from Bishop to Long Valley, in sec. 9, T. 6 S., R. 31 E., was originally established August 3, 1903, at a point about 100 feet above its junction with Rock Creek and 150 feet below the bridge, and was reestablished at the new site May 13, 1908.

Considerable water is diverted from the creek above the gaging station, and the water which passes the station is that which flows directly into Rock Creek. The drainage area above the mouth of the canyon is approximately 32 square miles.

The present gage is a vertical staff on the left bank 300 feet above the bridge. The original gage datum has not been maintained.

Discharge measurements are made from the footbridge. The daily variation in stage of this creek during high water is large, owing to the effect of warm days and cool nights on the snow in the headwater region, but an attempt was made to record gage heights representing the mean for the day.

The channel is composed of lava rock and sand and is fairly permanent.

*Discharge measurements of Pine Creek near Round Valley, Cal., in 1903–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* |
| Aug. 3 | R. S. Hawley | 1.90 | 15 |
| 8 | do | 1.87 | 10.4 |
| 18 | do | 1.73 | 5.7 |
| Sept. 1 | do | 1.71 | 5.9 |
| 10 | do | 1.71 | 6.3 |
| Nov. 24 | do | 1.89 | 10.1 |
| 1904. | | | |
| Apr. 27 | R. S. Hawley | 1.70 | 4.2 |
| June 2 | do | 2.80 | 67 |
| 15 | do | 3.70 | 185 |
| July 13 | Clausen and Barnes | 2.95 | 84 |
| Aug. 3 | L. M. Barnes | 2.70 | 58 |
| Sept. 9 | R. S. Hawley | 1.87 | 10.7 |
| Oct. 13 | Hawley, Clapp, and Taylor. | 2.30 | 31 |
| Nov. 12 | R. J. Taylor | 2.07 | 21 |
| Dec. 6 | do | 1.90 | 16 |
| 1905. | | | |
| Jan. 16 | R. J. Taylor | 1.91 | 13.3 |
| Feb. 9 | do | 1.86 | 10.2 |
| Apr. 4 | J. S. Evans | 1.80 | 2 |
| 25 | do | 1.70 | 5.8 |
| June 27 | do | 2.90 | 73 |
| July 25 | do | 2.05 | 23 |
| Aug. 15 | do | 1.80 | 7.2 |
| Sept. 8 | do | 1.75 | 6.7 |
| 27 | do | 1.78 | 6.2 |
| Nov. 2 | F. R. S. Buttemer | 1.83 | 8.7 |
| 24 | do | 1.85 | 7.7 |
| Dec. 10 | do | 1.82 | 7.6 |
| 1906. | | | |
| Jan. 8 | F. R. S. Buttemer | 1.80 | 7 |
| 14 | do | 2.13 | 22 |
| Aug. 23 | Shuey and Hawley | 3.85 | 90 |
| 27 | R. S. Hawley | 3.75 | 92 |
| Nov. 3 | G. R. Shuey | 2.95 | 9 |
| 30 | do | 3.00 | 9.2 |
| 1907. | | | |
| Feb. 13 | G. R. Shuey | 2.95 | 11 |
| Mar. 12 | do | 2.95 | 9.1 |
| Apr. 26 | do | 3.00 | 13 |
| May 15 | do | 3.05 | 13 |
| 30 | do | 3.60 | 53 |
| July 3 | do | 4.70 | 213 |
| 24 | do | 4.20 | 182 |
| Aug. 4 | Shuey and Post | 4.00 | 138 |
| 24 | R. B. Post | 3.48 | 52 |
| Sept. 7 | do | 3.30 | 41 |
| 23 | do | 3.05 | 22 |
| Oct. 5 | do | 2.98 | 18 |
| Nov. 17 | do | 2.89 | 13 |
| 1908. | | | |
| Feb. 22 | R. B. Post | 3.02 | 17 |
| Mar. 29 | do | 2.69 | 5.9 |
| May 13 | do | 3.48 | 4.4 |
| June 18 | do | 3.87 | 20 |
| July 15 | Post and Lamb | 4.19 | 50 |
| 3 | W. A. Lamb | 4.32 | 67 |
| Aug. 25 | do | 3.38 | 3.8 |
| Sept. 16 | do | 3.60 | 10 |
| Oct. 7 | do | 3.60 | 9.7 |
| 22 | A. T. Barrows | 3.51 | 6.6 |
| Nov. 6 | do | 3.49 | 5.6 |
| 26 | Barrows and Lee | 3.45 | 4.9 |
| 1909. | | | |
| Jan. 22 | R. E. Haines | 3.58 | 9 |
| Feb. 11 | do | 3.51 | 7.4 |
| 27 | do | 3.47 | 5.5 |
| Mar. 18 | do | 3.40 | 4 |
| Apr. 8 | do | 3.40 | 3.9 |
| 29 | do | 3.38 | 3.3 |
| May 19 | do | 3.82 | 19 |
| June 10 | do | 4.86 | 117 |
| 30 | do | 5.65 | 248 |
| July 23 | do | 4.99 | 126 |
| Aug. 11 | do | 4.08 | 31.2 |

*Discharge measurements of Pine Creek near Round Valley, Cal., in 1903–1912*—Contd.

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1909. | | *Feet.* | *Sec.-ft.* | 1911. | | *Feet.* | *Sec.-ft.* |
| Sept. 1 | R. E. Haines | 4.17 | 36.8 | May 6 | C. H. Lee | 3.68 | 6.4 |
| 22 | do | 3.70 | 8.9 | June 24 | do | 5.28 | 145 |
| Oct. 13 | do | 3.70 | 11.3 | July 8 | do | 6.35 | 297 |
| Nov. 3 | do | 3.70 | 8.3 | Aug. 2 | J. E. Jones | 4.80 | 92 |
| 24 | do | 3.63 | 5.6 | 23 | do | 4.12 | 32 |
| 1910. | | | | Sept. 20 | do | 3.75 | 11 |
| Mar. 9 | R. E. Haines | 3.58 | 4.3 | Oct. 24 | do | 3.72 | 10 |
| 30 | do | 3.60 | 4.9 | Nov. 22 | do | 3.65 | 8 |
| Apr. 21 | do | 3.81 | 13 | Dec. 12 | do | 3.60 | 7.3 |
| May 11 | do | 3.72 | 9.2 | 1912. | | | |
| June 25 | C. H. Lee | 4.50 | 65 | Jan. 16 | J. E. Jones | 3.58 | 6.2 |
| July 11 | do | 4.20 | 42 | Feb. 21 | do | 3.50 | 4 |
| Aug. 3 | do | 3.95 | 20 | Mar. 21 | do | 3.43 | 2.6 |
| 24 | F. G. Wood | 3.80 | 11 | 21 | do | 3.43 | 2.2 |
| Sept. 18 | G. T. Peekema | 3.60 | 4.9 | Apr. 16 | do | 3.45 | 2.4 |
| Oct. 22 | do | 3.60 | 4.9 | 16 | do | 3.45 | 1.8 |
| Nov. 18 | do | 3.63 | 5.4 | May 9 | do | 3.45 | 2 |
| Dec. 21 | do | 3.60 | 4.7 | 9 | do | 3.45 | 3 |
| 1911. | | | | 22 | do | 3.30 | .4 |
| Jan. 26 | G. T. Peekema | 3.61 | 5.5 | June 12 | do | 4.58 | 74 |
| Mar. 12 | C. H. Lee | 3.68 | 6.5 | | | | |

NOTE.—Beginning May 13, 1908, the gage heights refer to a new gage at a different datum.

*Daily gage height, in feet, of Pine Creek near Round Valley, Cal., for 1903–1912.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | | 1.75 | 11 | 1.8 | 1.7 | 21 | 1.7 | 1.7 |
| 2 | | 1.75 | 12 | 1.9 | 1.7 | 22 | 1.72 | 1.7 |
| 3 | | 1.72 | 13 | 1.9 | 1.7 | 23 | 1.8 | 1.73 |
| 4 | 1.9 | 1.7 | 14 | 1.8 | 1.7 | 24 | 1.75 | 1.72 |
| 5 | 1.9 | 1.7 | 15 | 1.8 | 1.7 | 25 | 1.8 | 1.7 |
| 6 | 1.9 | 1.72 | 16 | 1.8 | 1.7 | 26 | 1.8 | 1.7 |
| 7 | 1.9 | 1.73 | 17 | 1.8 | 1.7 | 27 | 1.75 | 1.7 |
| 8 | 1.9 | 1.7 | 18 | 1.73 | 1.7 | 28 | 1.73 | 1.75 |
| 9 | 1.8 | 1.72 | 19 | 1.7 | 1.7 | 29 | 1.7 | 1.8 |
| 10 | 1.8 | 1.75 | 20 | 1.7 | 1.7 | 30 | 1.7 | 1.8 |
| | | | | | | 31 | 1.7 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | | |
| 1 | 1.8 | 1.9 | 1.85 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 2.6 | 3.1 | 2.9 | 2.2 |
| 2 | 1.83 | 1.9 | 1.85 | 1.9 | 1.9 | 1.9 | 1.9 | 1.75 | 2.8 | 3.0 | 2.85 | 2.1 |
| 3 | 1.8 | 1.9 | 1.85 | 1.9 | 1.9 | 1.9 | 1.9 | 1.75 | 3.85 | 3.0 | 2.8 | 1.95 |
| 4 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.75 | 3.6 | 3.1 | 2.7 | 1.9 |
| 5 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.85 | 1.75 | 3.6 | 3.2 | 2.6 | 1.85 |
| 6 | 1.8 | 1.85 | 1.95 | 1.9 | 1.85 | 1.9 | 1.85 | 1.8 | 3.5 | 3.2 | 2.55 | 1.8 |
| 7 | 1.8 | 1.8 | 1.95 | 1.9 | 1.85 | 1.8 | 1.9 | 1.8 | 3.5 | 3.1 | 2.55 | 1.8 |
| 8 | 1.82 | 1.9 | 1.95 | 1.9 | 1.85 | 1.8 | 1.9 | 1.8 | 3.2 | 3.1 | 2.5 | 1.8 |
| 9 | 1.8 | 1.9 | 1.95 | 1.9 | 1.9 | 1.8 | 1.9 | 1.8 | 3.1 | 3.1 | 2.5 | 1.8 |
| 10 | 1.8 | 1.9 | 1.95 | 1.9 | 1.9 | 1.9 | 1.8 | 1.85 | 3.5 | 3.1 | 2.45 | 1.8 |
| 11 | 1.83 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 3.5 | 3.0 | 2.5 | 1.8 |
| 12 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 1.8 | 3.6 | 3.0 | 2.45 | 1.8 |
| 13 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 3.6 | 2.95 | 2.45 | 1.8 |
| 14 | 1.82 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.7 | 1.8 | 3.5 | 2.7 | 2.45 | 1.8 |
| 15 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.7 | 1.8 | 3.7 | 2.5 | 2.5 | 1.8 |
| 16 | 1.8 | 1.9 | 1.9 | 1.9 | 2.1 | 1.85 | 1.7 | 1.8 | 3.8 | 2.5 | 2.55 | 1.85 |
| 17 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.85 | 3.8 | 2.45 | 2.4 | 1.8 |
| 18 | 1.9 | 1.9 | 1.9 | 1.9 | 1.85 | 1.9 | 1.8 | 1.8 | 3.7 | 2.4 | 2.45 | 1.8 |
| 19 | 1.93 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 3.6 | 2.4 | 2.4 | 1.8 |
| 20 | 1.92 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.9 | 3.5 | 2.4 | 2.4 | 1.8 |
| 21 | 1.9 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.9 | 3.4 | 2.4 | 2.4 | 1.8 |
| 22 | 1.9 | 1.8 | 1.85 | 1.9 | 1.9 | 2.0 | 1.8 | 1.9 | 3.4 | 2.6 | 2.35 | 1.8 |
| 23 | 1.9 | 1.85 | 1.85 | 1.9 | 1.85 | 2.1 | 1.8 | 1.8 | 3.3 | 2.65 | 2.35 | 1.8 |
| 24 | 1.9 | 1.9 | 1.8 | 1.9 | 1.85 | 2.0 | 1.8 | 2.5 | 3.5 | 2.65 | 2.4 | 2.0 |
| 25 | 1.9 | 1.9 | 1.85 | 1.9 | 1.9 | 1.9 | 1.8 | 3.0 | 3.4 | 2.7 | 2.4 | 2.2 |

*Daily gage height, in feet, of Pine Creek near Round Valley, Cal., for 190—191—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 190—1 | | | | | | | | | | | | |
| [illegible] | 1.[illegible] | 1.[illegible] | 1.85 | 1.[illegible] | 1.[illegible] | 1.[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 1.[illegible] | [illegible] | [illegible] | 1. | 1.[illegible] | 1. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 1.[illegible] | 1. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 1.[illegible] | [illegible] | 1. | 1. | 1. | 1.[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 1. | [illegible] | [illegible] | 1. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 1.[illegible] | [illegible] | 1.[illegible] | 1.[illegible] | [illegible] | 1.[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 190—. | | | | | | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19—. | | | | | | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Pine Creek near Round Valley, Cal., for 1903-1912*—Cont'd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 1 | 3.25 | 3.0 | 3.0 | 2.95 | 3.0 | 2.95 | 2.95 | 3.0 | 4.0 | 4.8 | 4.3 | 3.4 |
| 2 | 3.25 | 3.0 | 3.0 | 2.95 | 3.0 | 2.95 | 2.95 | 3.0 | 4.1 | 4.7 | 4.3 | 3.4 |
| 3 | 3.25 | 3.0 | 3.0 | 2.95 | 3.0 | 2.95 | 3.0 | 3.0 | 4.2 | 4.7 | 4.3 | 3.4 |
| 4 | 3.25 | 3.0 | 3.0 | 2.95 | 3.0 | 3.1 | 3.0 | 3.0 | 4.3 | 4.65 | 4.2 | 3.35 |
| 5 | 3.25 | 3.0 | 3.0 | 2.95 | 3.0 | 3.3 | 3.0 | 3.0 | 4.3 | 4.65 | 4.1 | 3.35 |
| 6 | 3.2 | 3.0 | 3.0 | 2.95 | 3.0 | 3.2 | 2.95 | 3.0 | 4.2 | 4.6 | 4.0 | 3.3 |
| 7 | 3.2 | 3.0 | 3.0 | 2.95 | 3.0 | 3.1 | 2.95 | 3.0 | 4.1 | 4.6 | 4.0 | 3.3 |
| 8 | 3.15 | 2.9 | 3.0 | 2.95 | 3.0 | 3.1 | 2.95 | 2.95 | 4.05 | 4.5 | 3.9 | 3.3 |
| 9 | 3.15 | 2.9 | 3.0 | 2.9 | 3.0 | 3.0 | 3.0 | 2.9 | 4.0 | 4.4 | 3.9 | 3.3 |
| 10 | 3.15 | 2.9 | 3.0 | 2.9 | 3.0 | 3.1 | 3.0 | 2.9 | 4.0 | 4.4 | 3.8 | 3.25 |
| 11 | 3.1 | 2.9 | 2.95 | 2.9 | 3.0 | 3.2 | 3.0 | 2.9 | 3.9 | 4.3 | 3.75 | 3.2 |
| 12 | 3.05 | 2.9 | 2.95 | 2.9 | 3.0 | 2.95 | 3.0 | 3.0 | 3.8 | 4.3 | 3.7 | 3.2 |
| 13 | 3.05 | 2.9 | 2.9 | 2.9 | 3.0 | 2.9 | 3.0 | 3.1 | 3.8 | 4.3 | 3.75 | 3.2 |
| 14 | 3.05 | 2.9 | 2.9 | 2.9 | 3.0 | 2.9 | 3.0 | 3.2 | 3.7 | 4.4 | 3.75 | 3.2 |
| 15 | 3.05 | 2.9 | 2.9 | 2.9 | 3.0 | 2.85 | 3.0 | 3.25 | 3.5 | 4.35 | 3.8 | 3.2 |
| 16 | 3.05 | 2.9 | 2.9 | 2.9 | 3.0 | 2.95 | 3.0 | 3.3 | 3.2 | 4.3 | 3.8 | 3.2 |
| 17 | 3.0 | 2.9 | 2.9 | 2.9 | 3.0 | 2.9 | 3.0 | 3.3 | 3.0 | 4.2 | 3.8 | 3.2 |
| 18 | 3.0 | 2.9 | 2.9 | 2.95 | 3.0 | 3.1 | 3.0 | 3.4 | 3.0 | 4.2 | 3.8 | 3.2 |
| 19 | 3.0 | 2.9 | 2.9 | 2.95 | 3.0 | 3.1 | 3.0 | 3.4 | 3.7 | 4.2 | 3.8 | 3.15 |
| 20 | 3.0 | 2.9 | 2.95 | 2.95 | 3.0 | 3.1 | 3.0 | 3.4 | 3.65 | 4.25 | 3.75 | 3.1 |
| 21 | 3.0 | 2.9 | 2.95 | 3.0 | 3.0 | 3.1 | 3.0 | 3.35 | 4.0 | 4.25 | 3.7 | 3.1 |
| 22 | 3.0 | 2.95 | 2.95 | 3.0 | 3.0 | 3.0 | 3.0 | 3.35 | 4.0 | 4.3 | 3.7 | 3.05 |
| 23 | 3.0 | 3.0 | 2.95 | 3.0 | 3.0 | 3.0 | 3.0 | 3.3 | 4.1 | 4.3 | 3.6 | 3.05 |
| 24 | 3.0 | 3.0 | 2.95 | 3.0 | 2.95 | 3.0 | 3.0 | 3.3 | 4.0 | 4.3 | 3.5 | 3.05 |
| 25 | 3.0 | 3.0 | 2.95 | 3.0 | 2.95 | 3.0 | 3.0 | 3.3 | 4.0 | 4.2 | 3.5 | 3.1 |
| 26 | 3.0 | 3.0 | 2.95 | 3.0 | 2.9 | 3.0 | 3.0 | 3.4 | 4.1 | 4.15 | 3.45 | 3.1 |
| 27 | 3.0 | 3.0 | 2.95 | 3.0 | 2.9 | 3.0 | 3.0 | 3.5 | 4.45 | 4.1 | 3.4 | 3.05 |
| 28 | 3.0 | 3.0 | 2.95 | 3.0 | 2.95 | 3.0 | 3.0 | 3.6 | 4.7 | 4.1 | 3.4 | 3.0 |
| 29 | 3.0 | 3.0 | 2.95 | 3.0 | ...... | 3.0 | 3.0 | 3.7 | 4.9 | 4.2 | 3.4 | 3.0 |
| 30 | 3.0 | 3.0 | 2.95 | 3.0 | ...... | 3.0 | 3.0 | 3.8 | 5.0 | 4.2 | 3.4 | 3.0 |
| 31 | 3.0 | ...... | 2.95 | 3.0 | ...... | 3.0 | ...... | 4.0 | ...... | 4.25 | 3.4 | ...... |
| 1907-8. | | | | | | | | | | | | |
| 1 | 3.0 | 3.0 | 2.9 | 2.9 | 2.75 | 2.7 | 2.8 | 2.3 | 3.4 | 3.9 | 4.4 | 3.4 |
| 2 | 3.0 | 3.0 | 2.9 | 2.9 | 2.75 | 2.7 | 2.75 | 2.4 | 3.4 | 3.95 | 4.4 | ...... |
| 3 | 3.0 | 3.0 | 2.9 | 2.9 | 2.75 | 2.7 | 2.7 | a2.4 | 3.4 | 4.0 | 4.4 | 3.4 |
| 4 | 3.0 | 3.0 | 2.9 | 2.9 | 2.75 | 2.75 | 2.7 | a2.4 | 3.5 | 4.0 | 4.4 | ...... |
| 5 | 3.0 | 2.9 | 2.9 | 2.9 | 2.75 | 2.75 | 2.7 | a2.4 | 3.4 | 4.2 | 4.3 | 3.4 |
| 6 | 3.0 | 2.85 | 2.95 | 2.9 | 2.75 | 2.7 | 2.7 | a2.4 | 3.6 | 4.3 | 4.3 | 3.4 |
| 7 | 3.0 | 2.85 | 2.95 | 2.85 | 2.7 | 2.7 | 2.7 | a2.4 | 3.6 | 4.3 | 4.4 | ...... |
| 8 | 3.0 | 2.8 | 2.95 | 2.85 | 2.7 | 2.7 | 2.7 | a2.3 | 3.7 | 4.3 | 4.5 | 3.4 |
| 9 | 3.0 | 2.8 | 2.9 | 2.8 | 2.7 | 2.7 | 2.65 | a2.3 | 3.6 | 4.3 | 4.45 | 3.4 |
| 10 | 3.0 | 2.85 | 2.9 | 2.8 | 2.7 | 2.7 | 2.65 | a2.3 | 3.8 | 4.4 | 4.4 | ...... |
| 11 | 3.0 | 2.9 | 2.9 | 2.8 | 2.7 | 2.7 | 2.6 | a2.3 | 3.8 | 4.45 | 4.5 | 3.4 |
| 12 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 | 2.7 | a2.5 | a2.3 | 3.75 | 4.5 | 4.3 | 3.4 |
| 13 | 3.0 | 3.0 | 2.85 | 2.8 | 2.7 | 2.7 | a2.35 | 3.2 | 3.8 | 4.6 | 4.4 | 3.4 |
| 14 | 3.0 | 2.9 | 2.85 | 2.8 | 2.7 | 2.7 | 2.2 | 3.4 | 3.7 | 4.6 | 4.4 | ...... |
| 15 | 3.0 | 2.9 | 2.85 | 2.8 | 2.7 | 2.65 | 2.2 | 3.4 | 3.8 | 4.5 | 4.1 | 3.5 |
| 16 | 3.0 | 2.9 | 2.85 | 2.8 | 2.7 | 2.65 | 2.1 | 3.3 | 3.85 | 4.6 | 4.0 | 3.6 |
| 17 | 3.0 | 2.9 | 2.85 | 2.85 | 2.7 | 2.65 | 2.1 | 3.2 | 3.9 | 4.5 | 3.9 | ...... |
| 18 | 3.0 | 2.9 | 2.85 | 2.85 | 2.75 | 2.65 | 2.5 | 3.1 | 3.8 | 4.4 | 3.8 | 3.5 |
| 19 | 3.0 | 2.9 | 2.85 | 2.85 | 2.8 | 2.65 | 2.6 | 3.2 | 3.9 | 4.4 | 3.75 | 3.5 |
| 20 | 3.0 | 2.9 | 2.85 | 2.85 | 2.8 | 2.65 | 2.3 | 3.4 | 3.9 | 4.3 | 3.7 | ...... |
| 21 | 3.05 | 2.9 | 2.85 | 2.8 | 2.85 | 2.65 | 2.3 | 3.6 | 3.95 | 4.1 | 3.7 | 3.6 |
| 22 | 3.05 | 2.9 | 2.9 | 2.85 | 3.05 | 2.7 | 2.3 | 3.3 | 3.9 | 4.2 | 3.7 | ...... |
| 23 | 3.1 | 2.9 | 2.9 | 2.85 | 3.0 | 2.75 | 2.3 | 3.4 | 3.8 | 4.15 | 3.7 | 3.7 |
| 24 | 3.05 | 2.9 | 2.9 | 2.9 | 3.0 | 2.75 | 2.5 | 3.3 | 3.9 | 4.0 | 3.65 | 3.7 |
| 25 | 3.0 | 2.9 | 2.9 | 2.9 | 2.9 | 2.7 | 2.5 | 3.4 | 3.95 | 4.0 | a3.4 | 3.7 |
| 26 | 3.0 | 2.9 | 2.9 | 2.9 | 2.85 | 2.75 | 2.5 | 3.3 | 4.0 | 4.2 | a3.45 | ...... |
| 27 | 2.95 | 2.9 | 2.9 | 2.9 | 2.8 | 2.75 | 2.6 | 3.3 | 3.9 | a4.2 | 3.5 | 3.7 |
| 28 | 2.95 | 2.9 | 2.9 | 2.85 | 2.75 | 2.8 | 2.5 | 3.4 | 3.9 | 4.2 | 3.5 | ...... |
| 29 | 3.0 | 2.9 | 2.85 | 2.85 | 2.7 | 2.8 | 2.5 | 3.4 | 3.9 | 4.3 | 3.45 | 3.7 |
| 30 | 3.0 | 2.9 | 2.85 | 2.8 | ...... | 2.8 | 2.5 | 3.3 | 3.9 | 4.3 | a3.4 | ...... |
| 31 | 3.0 | ...... | 2.85 | 2.8 | ...... | 2.8 | ...... | 3.4 | ...... | 4.4 | 3.4 | ...... |

a Estimated.

*Daily gage height, in feet, of Pine Creek near Round Valley, Cal., for 1908–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | | | | |
| 1 | 3.7 | | | | 3.5 | 3.4 | 3.4 | 3.4 | | 5.7 | 4.4 | 4.2 |
| 2 | 3.7 | 3.5 | 3.4 | 3.4 | | | | | 4.8 | 5.9 | 4.45 | |
| 3 | | | | | 3.5 | 3.4 | 3.4 | 3.4 | 5.4 | 6.0 | 4.4 | 4.15 |
| 4 | 3.65 | 3.45 | 3.4 | 3.4 | | | | | | | 4.3 | |
| 5 | | | | | 3.5 | 3.45 | 3.4 | 3.4 | 5.5 | 5.8 | 4.3 | 4.1 |
| 6 | 3.5 | 3.45 | 3.4 | 3.6 | | | | | | 5.6 | 4.2 | |
| 7 | | | | | 3.5 | 3.4 | 3.4 | 3.5 | 5.6 | 5.6 | | 4.0 |
| 8 | 3.5 | 3.45 | 3.4 | 3.4 | | | 3.4 | 3.55 | 5.7 | | 4.2 | |
| 9 | | | | | 3.5 | 3.4 | 3.4 | | 5.6 | 5.5 | 4.15 | 4.0 |
| 10 | | 3.45 | 3.4 | 3.4 | | | | 3.6 | | | | |
| 11 | 3.5 | | | | 3.5 | 3.25 | 3.4 | | 5.6 | 5.5 | 4.2 | 4.0 |
| 12 | | 3.45 | 3.4 | 3.5 | 3.5 | | | 3.7 | | | | |
| 13 | 3.5 | | | | | 3.4 | 3.4 | | 5.45 | 5.4 | 4.25 | 4.0 |
| 14 | | 3.5 | 3.4 | 3.6 | 3.5 | | 3.4 | 3.7 | 5.5 | | | |
| 15 | 3.5 | | | | | 3.4 | | | | 5.3 | 4.2 | 3.9 |
| 16 | | 3.45 | 3.4 | 3.4 | 3.5 | | 3.4 | 3.8 | | 5.3 | 4.2 | |
| 17 | 3.6 | | | | | 3.4 | | | 5.4 | | 4.25 | 3.85 |
| 18 | | 3.4 | 3.4 | 3.5 | 3.5 | 3.4 | | 3.7 | 5.35 | 4.9 | | 3.8 |
| 19 | 3.5 | | | | | 3.3 | 3.4 | 3.8 | | 4.8 | 4.3 | 3.85 |
| 20 | | 3.45 | 3.4 | 3.4 | 3.5 | | 3.4 | 3.75 | 5.4 | | 4.3 | 3.7 |
| 21 | 3.65 | | | | | 3.3 | | | 5.5 | 4.85 | 4.3 | 3.75 |
| 22 | | 3.45 | 3.4 | 3.45 | 3.5 | | 3.35 | 3.7 | | 4.9 | | 3.7 |
| 23 | | | | | | 3.35 | | | 5.6 | 4.9 | 4.3 | |
| 24 | | 3.45 | 3.4 | 3.4 | 3.5 | | 3.35 | 3.75 | 5.6 | | 4.25 | 3.8 |
| 25 | 3.5 | | | | | 3.4 | | | | 4.8 | | |
| 26 | | 3.45 | 3.4 | 3.4 | 3.4 | | 3.35 | 3.7 | 5.7 | | 4.3 | 3.7 |
| 27 | 3.55 | | | | 3.5 | 3.4 | | 3.9 | 5.6 | 4.7 | 4.25 | |
| 28 | | 3.4 | 3.45 | 3.4 | 3.4 | | 3.3 | | | | 4.3 | 3.8 |
| 29 | 3.5 | | | | | 3.4 | 3.4 | 4.0 | 5.6 | 4.6 | | |
| 30 | | 3.4 | 3.4 | 3.4 | | | 3.3 | | 5.85 | | 4.25 | 3.7 |
| 31 | 3.5 | | | | | 3.4 | | 4.5 | | 4.5 | 4.2 | |
| 1909–10. | | | | | | | | | | | | |
| 1 | | | 3.7 | 3.9 | | 3.6 | 3.4 | 3.75 | 5.6 | 4.4 | | 3.7 |
| 2 | 3.7 | 3.5 | | | 3.6 | | | | | | 3.95 | |
| 3 | 3.65 | 3.7 | 3.6 | 3.9 | | 3.65 | 3.45 | 3.75 | 5.7 | 4.2 | | 3.65 |
| 4 | 3.7 | 3.4 | 3.65 | | 3.6 | 3.6 | | | 5.8 | | 3.9 | 3.6 |
| 5 | | | | 3.7 | 3.65 | | 3.4 | 3.85 | 5.7 | 4.3 | 3.8 | |
| 6 | 3.7 | 3.5 | 3.7 | | | 3.6 | 3.4 | | 5.6 | 4.15 | | 3.6 |
| 7 | 3.8 | | | 3.7 | 3.7 | 3.55 | | 3.85 | | | 3.6 | |
| 8 | | 3.4 | 3.7 | | | 3.6 | 3.4 | 3.9 | 5.5 | 4.15 | | 3.6 |
| 9 | 3.8 | 3.6 | | 3.7 | 3.7 | 3.58 | | | | | 3.55 | |
| 10 | 3.8 | | 3.7 | | | 3.55 | 3.45 | 4.0 | 5.6 | 4.1 | | 3.65 |
| 11 | | 3.5 | | 3.7 | 3.7 | 3.55 | 3.55 | 4.2 | | 4.2 | 3.65 | 3.6 |
| 12 | 3.8 | 3.5 | 3.7 | | | | | | 5.5 | 4.1 | 3.7 | |
| 13 | 3.8 | | 3.7 | 3.7 | 3.7 | 3.55 | 3.5 | 4.3 | | | | 3.6 |
| 14 | | 3.4 | | | | | | | 5.7 | 4.1 | 3.7 | |
| 15 | 3.75 | | 3.7 | 3.7 | 3.7 | 3.6 | 3.55 | 4.4 | | | | 3.5 |
| 16 | | 3.55 | | | | | 3.7 | 4.4 | 5.6 | 4.15 | 3.65 | |
| 17 | 3.75 | | 3.7 | 3.7 | 3.6 | 3.5 | 3.8 | 4.5 | 5.7 | 4.15 | | 3.5 |
| 18 | | 3.5 | | | 3.6 | | | | 5.4 | | 3.6 | |
| 19 | 3.7 | | 3.7 | 3.6 | | 3.55 | 3.7 | 4.45 | 5.4 | 4.15 | | 3.45 |
| 20 | | 3.6 | | | 3.6 | | 3.8 | 4.6 | | | 3.6 | |
| 21 | 3.75 | 3.6 | 3.7 | 3.65 | 3.65 | 3.5 | 3.81 | | 5.2 | 4.15 | | 3.45 |
| 22 | | | | | | | 3.65 | 4.7 | 5.2 | | 3.65 | |
| 23 | 3.7 | 3.65 | 3.7 | 3.6 | 3.6 | 3.55 | | | 5.0 | 4.2 | | 3.4 |
| 24 | 3.75 | 3.6 | 3.7 | | | | 3.7 | 4.8 | 4.8 | | 3.7 | |
| 25 | | 3.7 | | 3.7 | 3.6 | 3.5 | 3.75 | | 4.5 | 4.2 | | 3.45 |
| 26 | 3.7 | | 3.7 | | | | 3.8 | 4.8 | 4.7 | | 3.7 | |
| 27 | | 3.7 | | 3.7 | 3.6 | 3.5 | 3.9 | 4.9 | 4.7 | 4.25 | | 3.4 |
| 28 | 3.7 | | 3.7 | | 3.6 | | 4.0 | | | 4.2 | 3.65 | |
| 29 | 3.6 | 3.7 | | 3.65 | | 3.4 | | 5.0 | 4.6 | | | 3.45 |
| 30 | 3.6 | 3.7 | 3.7 | | | 3.6 | 3.8 | | | 3.95 | 3.7 | 3.4 |
| 31 | | | 3.7 | 3.7 | | 3.4 | | 5.3 | | 3.9 | | |

*Daily gage height, in feet, of Pine Creek near Round Valley, Cal., for 1903–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 1 | 3.45 | 3.5 | 3.6 | 3.6 | 4.1 | 3.55 | 3.5 | 3.5 | 3.9 | | 5.1 | 3.95 |
| 2 | | | | | | | | | | 6.25 | | |
| 3 | 3.4 | 3.5 | 3.65 | 3.6 | 3.6 | 3.6 | 3.5 | 3.5 | 4.1 | | 5.15 | 3.9 |
| 4 | | | 3.65 | | | | | | | 6.2 | | 3.9 |
| 5 | 3.5 | 3.4 | | 3.6 | 3.6 | 3.6 | 3.5 | 3.45 | 4.3 | 6.25 | 4.9 | |
| 6 | | 3.4 | 3.55 | | | | | | | 6.2 | | 3.95 |
| 7 | 3.45 | | | 3.55 | 3.6 | 3.6 | 3.55 | 3.5 | 4.5 | 6.25 | 4.85 | |
| 8 | | 3.35 | 3.6 | | | | | 3.5 | 4.7 | 6.3 | | 3.85 |
| 9 | 3.5 | | | | 3.55 | 4.0 | 3.5 | | | | 4.55 | |
| 10 | | 3.45 | 3.55 | 3.65 | | 3.8 | | 3.5 | 4.75 | 6.15 | | 3.75 |
| 11 | 3.45 | | 3.65 | | 3.55 | | 3.5 | 3.5 | 4.8 | | 4.55 | |
| 12 | | 3.4 | | 3.6 | | 3.68 | | | | 6.2 | | 3.7 |
| 13 | 3.55 | | 3.55 | | 3.6 | | 3.5 | 3.55 | 4.8 | 6.15 | 4.3 | |
| 14 | 3.5 | 3.5 | | 3.6 | | 3.65 | | 3.6 | 4.9 | | | 3.65 |
| 15 | | | 3.6 | 3.55 | 3.6 | | 3.5 | | | 6.5 | 4.3 | |
| 16 | 3.55 | 3.55 | | | | 3.6 | | 3.6 | 5.4 | 6.3 | | 3.65 |
| 17 | | 3.6 | 3.55 | 3.6 | 3.55 | 3.65 | 3.55 | 3.9 | 5.8 | | 4.3 | |
| 18 | 3.55 | | 3.6 | | | 3.6 | | | 6.0 | 6.25 | 4.33 | 3.7 |
| 19 | | 3.55 | | 3.55 | 3.6 | | 3.5 | 4.2 | 6.4 | | | |
| 20 | 3.6 | | 3.55 | | | 3.63 | | | | 6.1 | 4.25 | 3.75 |
| 21 | 3.55 | 3.6 | | 3.6 | 3.5 | | 3.53 | 4.25 | 6.6 | | | |
| 22 | | | 3.6 | 3.6 | | 3.6 | | 4.3 | | 6.15 | 4.3 | 3.65 |
| 23 | 3.55 | 3.6 | | | 3.5 | 3.65 | 3.5 | | 6.7 | | | |
| 24 | | | 3.6 | 3.6 | | 3.6 | | 4.4 | 6.6 | 5.9 | 4.1 | 3.55 |
| 25 | 3.6 | 3.6 | | | 3.5 | | 3.5 | | | | | |
| 26 | 3.65 | | 3.6 | 3.6 | 3.5 | 3.65 | | 4.2 | 6.2 | 5.9 | 4.15 | 3.5 |
| 27 | 3.6 | | | 3.65 | | | 3.5 | | | | | |
| 28 | | | 3.6 | | 3.5 | 3.6 | | 4.0 | 6.25 | 5.5 | 4.0 | 3.55 |
| 29 | 3.6 | 3.55 | 3.6 | | | | 3.5 | | | | 4.1 | |
| 30 | 3.55 | 3.6 | | 4.5 | | 3.65 | 3.5 | 3.9 | 6.2 | 5.5 | | 3.5 |
| 31 | 3.6 | | 3.6 | | | 3.6 | | | | | 4.0 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 4.3 | | | 3.5 | 3.5 | 3.2 | 3.4 | 3.0 | 5.0 |
| 2 | | 3.7 | 3.65 | | | | | | |
| 3 | 4.0 | | | 3.5 | 3.55 | | | 3.1 | 4.9 |
| 4 | | | 3.6 | | | 3.25 | 3.35 | | |
| 5 | 3.9 | 3.7 | | 3.5 | 3.5 | | | 3.35 | 4.95 |
| 6 | 3.75 | | 3.65 | | | 3.35 | 3.3 | | |
| 7 | 3.75 | 3.63 | | 3.55 | 3.5 | | | 3.45 | 4.8 |
| 8 | 3.7 | | 3.53 | | | 3.4 | 3.35 | 3.4 | |
| 9 | | 3.7 | | 3.5 | 3.53 | | | 3.45 | 4.7 |
| 10 | 3.7 | | 3.6 | | | 3.4 | 3.3 | | |
| 11 | | 3.65 | | 3.6 | 3.5 | | | 3.4 | 4.65 |
| 12 | 3.65 | | 3.6 | | | 3.45 | 3.35 | | 4.55 |
| 13 | | 3.7 | | 3.55 | 3.53 | | | 3.45 | |
| 14 | 3.63 | | 3.6 | | | 3.45 | 3.4 | | 4.5 |
| 15 | 3.7 | 3.65 | | 3.6 | 3.5 | | 3.35 | 3.5 | |
| 16 | 3.65 | | 3.6 | | | 3.5 | 3.45 | 3.45 | 4.5 |
| 17 | 3.75 | 3.65 | 3.55 | 3.65 | 3.5 | | | 3.45 | 4.55 |
| 18 | | | | 3.6 | | 3.45 | 3.4 | | |
| 19 | 3.7 | 3.65 | 3.6 | 3.65 | 3.5 | 3.5 | | 3.4 | 4.55 |
| 20 | | | | | | | 3.45 | | 4.6 |
| 21 | 3.7 | 3.65 | 3.6 | 3.6 | 3.5 | 3.43 | | 3.2 | 4.5 |
| 22 | | 3.65 | | | | | 3.4 | 3.3 | |
| 23 | 3.65 | | 3.6 | 3.55 | 3.5 | 3.45 | | | 4.15 |
| 24 | | 3.7 | 3.6 | | | | 3.45 | 3.34 | 4.0 |
| 25 | 3.7 | | | 3.53 | 3.3 | 3.5 | | | |
| 26 | | 3.65 | | | | | 3.35 | 4.5 | 4.0 |
| 27 | 3.65 | | 3.53 | 3.5 | 3.2 | 3.48 | | | 4.0 |
| 28 | | 3.7 | 3.6 | | | | 3.4 | 4.75 | 4.0 |
| 29 | 3.7 | | | 3.5 | 3.25 | 3.48 | | | |
| 30 | | 3.65 | 3.55 | 3.5 | | | 3.4 | 4.9 | |
| 31 | 3.6 | | | | | 3.45 | | | |

*Rating tables for [illegible] Creek near Round Valley, Cal.*

**August [illegible], to June [illegible].**

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| Feet. | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] 10 | 95 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] 30 | 106 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] 30 | [illegible]19 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] 40 | [illegible]33 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] 50 | 149 |

[illegible] discharge measurements made during [illegible]. It is well defined between [illegible].

**August [illegible] to December [illegible].**

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.[illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.[illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |

[illegible] discharge measurements made during [illegible] is not well defined. Discharge [illegible] from rating curves covering short periods of time.

*[illegible] discharge, in second-feet, of [illegible] Creek near Round Valley, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 258 | 58 | 40 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 63 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 55 | 36 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 49 | 34 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 49 | 32 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 238 | 40 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 242 | 238 | 40 | 25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 40 | 25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 242 | 218 | 36 | 25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 242 | 218 | 38 | 25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 242 | 218 | 40 | 25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 209 | 42 | 25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 200 | 44 | 25 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 226 | [illegible] | 42 | 22 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 221 | 182 | 40 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 182 | 40 | 30 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 150 | 44 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 119 | 46 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 49 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 105 | 49 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 112 | 49 | 11.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 119 | 49 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.5 | 242 | 119 | 49 | 11.2 |
| [illegible] | [illegible] | [illegible] | 3. | [illegible] | [illegible] | 242 | 112 | 44 | 13.4 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 14.8 | 250 | 105 | 46 | 11.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 258 | [illegible] | 49 | 9.0 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 242 | [illegible] | 44 | 11.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 242 | [illegible] | 49 | 13.4 |
| [illegible] | [illegible] | ....... | [illegible] | [illegible] | [illegible] | 242 | [illegible] | 46 | 11.2 |
| [illegible] | [illegible] | ..... | [illegible] | [illegible] | [illegible] | 250 | 74 | 44 | 9.0 |
| [illegible] | [illegible] | ...... | [illegible] | .... | [illegible] | [illegible] | [illegible] | 40 | ...... |

*Daily discharge, in second-feet, of Pine Creek near Round Valley, Cal., for 1909–1912*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 1 | 9.0 | 4.2 | 9.0 | 17 | 6.4 | 4.8 | 1.5 | 10 | 239 | 57 | 18 | 8 |
| 2 | 9.0 | 3.4 | 7.4 | 17 | 4.8 | 5.6 | 1.8 | 10 | 248 | 47 | 20 | 7.2 |
| 3 | 7.4 | 3.0 | 5.8 | 17 | 4.8 | 6.4 | 2.2 | 10 | 258 | 39 | 18 | 6.4 |
| 4 | 9.0 | 1.5 | 7.4 | 12 | 4.8 | 4.8 | 1.8 | 12 | 277 | 43 | 17 | 4.8 |
| 5 | 9.0 | 2.4 | 8.2 | 8 | 6.4 | 4.8 | 1.5 | 14 | 258 | 47 | 12 | 4.8 |
| 6 | 9.0 | 3.4 | 9.0 | 8 | 7.2 | 4.8 | 1.5 | 14 | 239 | 35 | 8 | 4.8 |
| 7 | 13.4 | 2.4 | 9.0 | 8 | 8 | 3.8 | 1.5 | 14 | 230 | 35 | 4.8 | 4.8 |
| 8 | 13.4 | 1.5 | 9.0 | 8 | 8 | 4.8 | 1.5 | 17 | 220 | 35 | 4.3 | 4.8 |
| 9 | 13.4 | 5.8 | 9.0 | 8 | 8 | 4.4 | 1.8 | 20 | 230 | 33 | 3.8 | 5.6 |
| 10 | 13.4 | 4.6 | 9.0 | 8 | 8 | 3.8 | 2.2 | 24 | 239 | 31 | 4.8 | 6.4 |
| 11 | 13.4 | 3.4 | 9.0 | 8 | 8 | 3.8 | 3.8 | 39 | 230 | 39 | 6.4 | 4.8 |
| 12 | 13.4 | 3.4 | 9.0 | 8 | 8 | 3.8 | 3.3 | 43 | 220 | 31 | 8 | 4.8 |
| 13 | 13.4 | 2.4 | 9.0 | 8 | 8 | 3.5 | 2.8 | 47 | 239 | 31 | 8 | 4.8 |
| 14 | 12.3 | 1.5 | 9.0 | 8 | 8 | 4.3 | 3.3 | 52 | 258 | 31 | 8 | 3.8 |
| 15 | 11.2 | 3.0 | 9.0 | 8 | 8 | 4.8 | 3.8 | 57 | 248 | 33 | 7.2 | 2.8 |
| 16 | 11.2 | 4.6 | 9.0 | 8 | 6.4 | 3.8 | 8 | 57 | 239 | 35 | 6.4 | 2.8 |
| 17 | 11.2 | 4.0 | 9.0 | 8 | 4.8 | 2.8 | 12 | 68 | 258 | 35 | 5.6 | 2.8 |
| 18 | 10.1 | 3.4 | 9.0 | 6.4 | 4.8 | 3.3 | 10 | 75 | 201 | 35 | 4.8 | 2.5 |
| 19 | 9.0 | 4.6 | 9.0 | 4.8 | 4.8 | 3.8 | 8 | 62 | 201 | 35 | 4.8 | 2.2 |
| 20 | 10.1 | 5.8 | 9.0 | 5.6 | 4.8 | 3.3 | 12 | 80 | 182 | 35 | 4.8 | 2.2 |
| 21 | 11.2 | 5.8 | 9.0 | 6.4 | 6.4 | 2.8 | 12 | 86 | 164 | 35 | 5.6 | 2.2 |
| 22 | 10.1 | 6.6 | 9.0 | 5.6 | 5.6 | 3.3 | 6.4 | 92 | 164 | 37 | 6.4 | 1.8 |
| 23 | 9.0 | 7.4 | 9.0 | 4.8 | 4.8 | 3.8 | 7.2 | 98 | 132 | 39 | 7.2 | 1.5 |
| 24 | 11.2 | 5.8 | 9.0 | 6.4 | 4.8 | 3.3 | 8 | 105 | 105 | 39 | 8 | 1.8 |
| 25 | 10.1 | 9.0 | 9.0 | 8 | 4.8 | 2.8 | 10 | 105 | 66 | 39 | 8 | 2.2 |
| 26 | 9.0 | 9.0 | 9.0 | 8 | 4.8 | 2.8 | 12 | 105 | 92 | 41 | 8 | 1.8 |
| 27 | 9.0 | 9.0 | 9.0 | 8 | 4.8 | 2.8 | 17 | 118 | 92 | 43 | 7.2 | 1.5 |
| 28 | 9.0 | 9.0 | 9.0 | 7.2 | 4.8 | 2.2 | 24 | 125 | 86 | 39 | 6.4 | 1.8 |
| 29 | 5.8 | 9.0 | 9.0 | 6.4 | ...... | 1.5 | 17 | 132 | 80 | 20 | 7.2 | 2.2 |
| 30 | 5.8 | 9.0 | 9.0 | 7.2 | ...... | 4.8 | 12 | 156 | 68 | 20 | 8 | 1.5 |
| 31 | 5.0 | ...... | 9.0 | 8 | ...... | 1.5 | ...... | 182 | ...... | 17 | 8 | ...... |
| **1910–11.** | | | | | | | | | | | | |
| 1 | 2.2 | 2.8 | 4.8 | 5 | 30 | 4 | 3 | 3 | 17.2 | 278 | 124 | 20.5 |
| 2 | 1.8 | 2.8 | 5.6 | 5 | 18 | 4 | 3 | 3 | 24 | 282 | 127 | 19 |
| 3 | 1.5 | 2.8 | 6.4 | 5 | 5 | 5 | 3 | 3 | 30 | 278 | 130 | 18 |
| 4 | 2.2 | 2.2 | 6.4 | 5 | 5 | 5 | 3 | 2.6 | 38 | 274 | 116 | 18 |
| 5 | 2.8 | 1.5 | 4.8 | 5 | 5 | 5 | 3 | 2.8 | 45 | 282 | 102 | 16.7 |
| 6 | 2.5 | 1.5 | 3.8 | 5 | 5 | 5 | 3 | 2.6 | 54 | 274 | 99 | 15.5 |
| 7 | 2.2 | 1.4 | 4.3 | 4 | 5 | 5 | 4 | 3 | 62 | 282 | 96 | 15.5 |
| 8 | 2.5 | 1.2 | 4.8 | 4 | 5 | 14 | 4 | 3 | 81 | 290 | 81 | 15.5 |
| 9 | 2.8 | 1.5 | 4.3 | 5 | 4 | 23.5 | 3 | 3 | 84 | 278 | 66 | 13.4 |
| 10 | 2.5 | 2.2 | 3.8 | 6.5 | 4 | 12 | 3 | 3 | 86 | 266 | 66 | 11.2 |
| 11 | 2.2 | 1.8 | 6.4 | 6 | 4 | 9 | 3 | 3 | 91 | 280 | 66 | 10.4 |
| 12 | 2.8 | 1.5 | 4.8 | 5 | 4 | 7.4 | 3 | 3.5 | 91 | 274 | 56 | 9.5 |
| 13 | 3.8 | 2.2 | 3.8 | 5 | 5 | 7.0 | 3 | 4 | 91 | 266 | 45 | 8.8 |
| 14 | 2.8 | 2.8 | 4.3 | 5 | 5 | 6.5 | 3 | 5 | 102 | 294 | 45 | 8.2 |
| 15 | 3.3 | 3.3 | 4.8 | 4 | 5 | 5.8 | 3 | 5 | 131 | 322 | 45 | 8.2 |
| 16 | 3.8 | 3.8 | 4.3 | 4 | 5 | 5 | 3 | 5 | 160 | 290 | 45 | 8.2 |
| 17 | 3.8 | 4.8 | 3.8 | 5 | 4 | 6.5 | 4 | 17.2 | 214 | 286 | 45 | 8.8 |
| 18 | 3.8 | 4.3 | 4.8 | 5 | 4 | 5 | 4 | 27 | 244 | 282 | 47 | 9.5 |
| 19 | 4.3 | 3.8 | 4.3 | 4 | 5 | 5.4 | 3 | 37.5 | 306 | 270 | 44 | 10.4 |
| 20 | 4.8 | 4.3 | 3.8 | 4 | 4 | 5.9 | 3.3 | 39 | 322 | 259 | 41 | 11.2 |
| 21 | 3.8 | 4.8 | 4.3 | 5 | 3 | 5.4 | 3.6 | 41 | 339 | 262 | 43 | 9.7 |
| 22 | 3.8 | 4.8 | 4.8 | 5 | 3 | 5 | 3.3 | 45 | 370 | 266 | 45 | 8.2 |
| 23 | 3.8 | 4.8 | 4.8 | 5 | 3 | 6.5 | 3 | 49 | 356 | 248 | 38 | 7.0 |
| 24 | 4.3 | 4.8 | 4.8 | 5 | 3 | 5 | 3 | 53 | 339 | 229 | 30 | 5.9 |
| 25 | 4.8 | 4.8 | 4.8 | 5 | 3 | 5.8 | 3 | 45 | 306 | 229 | 32 | 5.4 |
| 26 | 6.4 | 5.0 | 4.8 | 5 | 3 | 6.5 | 3 | 37.5 | 274 | 229 | 34 | 5 |
| 27 | 4.8 | 5.3 | 4.8 | 6.5 | 3 | 5.8 | 3 | 30 | 260 | 201 | 29 | 5.4 |
| 28 | 4.8 | 5.5 | 4.8 | 25 | 3 | 5 | 3 | 23.5 | 282 | 173 | 23.5 | 5.9 |
| 29 | 4.8 | 3.8 | 4.8 | 45 | ...... | 5.8 | 3 | 20 | 278 | 173 | 30 | 5.4 |
| 30 | 3.8 | 4.8 | 4.8 | 62 | ...... | 6.5 | 3 | 17.2 | 274 | 173 | 27 | 5 |
| 31 | 4.8 | ...... | 4.8 | 46 | ...... | 5 | ...... | 17.2 | ...... | 148 | 23.5 | ...... |

*Daily discharge, in second-feet, of Pine Creek near Round Valley, Cal., for 1909-1912—Con.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 45 | 8.2 | 8.2 | 3.6 | 3.6 | 0 | 1.6 | 0 | 113 |
| 2 | 34 | 9.5 | 8.2 | 3.6 | 4.2 | 0 | 1.4 | 0 | 108 |
| 3 | 23.5 | 9.5 | 7.5 | 3.6 | 4.8 | .1 | 1.2 | 0 | 102 |
| 4 | 21 | 9.5 | 6.8 | 3.6 | 4.2 | .2 | 1.0 | .5 | 105 |
| 5 | 18 | 9.5 | 7.5 | 3.6 | 3.6 | .6 | .7 | 1.0 | 108 |
| 6 | 11.2 | 8.6 | 8.2 | 4.2 | 3.6 | 1.0 | .4 | 1.8 | 100 |
| 7 | 11.2 | 7.6 | 6.8 | 4.8 | 3.6 | 1.3 | .7 | 2.6 | 91 |
| 8 | 9.5 | 8.6 | 5.5 | 4.2 | 4.0 | 1.6 | 1.0 | 1.6 | 86 |
| 9 | 9.5 | 9.5 | 6.2 | 3.6 | 4.3 | 1.6 | .7 | 2.6 | 81 |
| 10 | 9.5 | 8.8 | 6.8 | 4.8 | 4.0 | 1.6 | .4 | 2.1 | 78 |
| 11 | 8.8 | 8.2 | 6.8 | 6.0 | 3.6 | 2.1 | .7 | 1.6 | 76 |
| 12 | 8.2 | 8.8 | 6.8 | 5.4 | 4.0 | 2.6 | 1.0 | 2.1 | 66 |
| 13 | 7.9 | 9.5 | 6.8 | 4.8 | 4.3 | 2.6 | 1.3 | 2.6 | 64 |
| 14 | 7.6 | 8.8 | 6.8 | 5.4 | 4.0 | 2.6 | 1.6 | 3.1 | 62 |
| 15 | 9.5 | 8.2 | 6.8 | 6.0 | 3.6 | 3.1 | 1.0 | 3.6 | 62 |
| 16 | 8.2 | 8.2 | 6.8 | 6.8 | 3.6 | 3.6 | 2.6 | 2.6 | 62 |
| 17 | 11.2 | 8.2 | 5.9 | 7.6 | 3.6 | 3.1 | 2.1 | 2.6 | 66 |
| 18 | 10.4 | 8.2 | 6.4 | 6.0 | 3.6 | 2.6 | 1.6 | 2.1 | 66 |
| 19 | 9.5 | 8.2 | 6.8 | 7.6 | 3.6 | 3.6 | 2.1 | 1.6 | 66 |
| 20 | 9.5 | 8.2 | 6.8 | 6.8 | 3.6 | 2.9 | 2.6 | .8 | 71 |
| 21 | 9.5 | 8.2 | 6.8 | 6.0 | 3.6 | 2.2 | 2.1 | 0 | 62 |
| 22 | 8.8 | 8.2 | 6.8 | 5.4 | 3.6 | 2.4 | 1.6 | .4 | 48 |
| 23 | 8.2 | 8.8 | 6.8 | 4.8 | 3.6 | 2.6 | 2.1 | .6 | 34 |
| 24 | 8.8 | 9.5 | 6.8 | 4.6 | 2.0 | 3.1 | 2.6 | .9 | 24 |
| 25 | 9.5 | 8.8 | 6.4 | 4.3 | .4 | 3.6 | 1.8 | 32 | 24 |
| 26 | 8.8 | 8.2 | 6.0 | 4.0 | .2 | 3.4 | 1.0 | 62 | 24 |
| 27 | 8.2 | 8.8 | 5.5 | 3.6 | 0 | 3.2 | 1.3 | 74 | 24 |
| 28 | 8.8 | 9.5 | 6.8 | 3.6 | .1 | 3.2 | 1.6 | 86 | 24 |
| 29 | 9.5 | 8.8 | 6.4 | 3.6 | .2 | 3.2 | 1.6 | 94 | 24 |
| 30 | 8.2 | 8.2 | 5.9 | 3.6 | ...... | 2.9 | 1.6 | 102 | 24 |
| 31 | 6.8 | ...... | 6.0 | 3.6 | ...... | 2.6 | ...... | 108 | ...... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to June 30, 1909, fairly well defined; July 1 to Dec. 31, 1909, fairly well defined; Jan. 1 to Dec. 31, 1910, well defined between discharges of 5 and 240 second-feet; Jan. 1 to June 23, 1911, fairly well defined; June 24 to Dec. 31, 1911, fairly well defined; Jan. 1 to June 30, 1912, fairly well defined. Discharge interpolated for days on which gage was not read.

*Monthly discharge of Pine Creek near Round Valley, Cal., for 1903-1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1903. | | | | | |
| August 4-31 | 13 | 4 | 7.9 | 439 | |
| September | 8 | 4 | 4.7 | 280 | |
| 1903-4. | | | | | |
| October | 14 | 8 | 10.8 | 664 | |
| November | 13 | 8 | 11.8 | 702 | |
| December | 16 | 8 | 12.6 | 775 | |
| January | 13 | 13 | 13 | 799 | |
| February | 23 | 8 | 12.4 | 713 | |
| March | 23 | 8 | 12.9 | 793 | |
| April | 13 | 5 | 9 | 536 | |
| May | 85 | 6 | 21.7 | 1,334 | |
| June | 213 | 52 | 142 | 8,450 | |
| July | 106 | 39 | 70 | 4,304 | |
| August | 75 | 28 | 44 | 2,705 | |
| September | 28 | 8 | 12 | 714 | |
| The year | 213 | 5 | 31.0 | 22,500 | |
| 1904-5. | | | | | |
| October | 45 | 18 | 28 | 1,722 | |
| November | 33 | 18 | 25 | 1,488 | |
| December | 33 | 13 | 17.5 | 1,076 | |
| January | 28 | 6 | 12.7 | 781 | |

*Monthly discharge of Pine Creek near Round Valley, Cal., for 1903–1912*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1904–5.** | | | | | |
| February | 28 | 8 | 10.6 | 589 | |
| March | 10 | 6 | 7.9 | 486 | |
| April | 8 | 4 | 6.5 | 387 | |
| May | 18 | 4 | 9.0 | 553 | |
| June | 119 | 13 | 68.1 | 4,052 | |
| July | 85 | 13 | 47.9 | 2,945 | |
| August | 8 | 4 | 4.8 | 295 | |
| September | 8 | 1 | 4.6 | 274 | |
| The year | 119 | 1 | 20.2 | 14,600 | |
| **1905–6.** | | | | | |
| October | 10 | 4 | 8.7 | 535 | |
| November | 10 | 8 | 8.5 | 506 | |
| December | 13 | 8 | 9.5 | 584 | |
| January | 30 | 8 | 13.7 | 842 | |
| February | 10 | 8 | 8.6 | 478 | |
| March | 33 | 6 | 14.5 | 892 | |
| April | 13 | 8 | 8.7 | 518 | |
| May | 33 | 8 | 16.0 | 984 | |
| June | .......... | .......... | 130 | 7,740 | |
| July | .......... | .......... | 160 | 9,840 | |
| August | .......... | .......... | 105 | 6,460 | |
| September | 70 | 28 | 46.2 | 2,750 | |
| The year | .......... | 4 | 44.1 | 32,100 | |
| **1906–7.** | | | | | |
| October | 28 | 10 | 15.5 | 953 | |
| November | 10 | 5 | 7.6 | 452 | |
| December | 10 | 5 | 7.5 | 461 | |
| January | 12 | 9 | 10.4 | 640 | C. |
| February | 12 | 9 | 11.6 | 644 | C. |
| March | 27 | 8 | 13.4 | 824 | C. |
| April | 12 | 10 | 11.7 | 696 | C. |
| May | 105 | 9 | 28.3 | 1,740 | C. |
| June | 262 | 12 | 111 | 6,600 | C. |
| July | 230 | 159 | 193 | 11,900 | C. |
| August | 206 | 46 | 101 | 6,210 | C. |
| September | 46 | 19 | 30.8 | 1,830 | C. |
| The year | 262 | 5 | 45.2 | 33,000 | |
| **1907–8** | | | | | |
| October | 24 | 19 | 19.3 | 1,190 | C. |
| November | 19 | 11 | 15.3 | 910 | C. |
| December | 17 | 13 | 14.4 | 885 | C. |
| January | 12 | 8.4 | 10.1 | 621 | C. |
| February | 20 | 5.8 | 8.2 | 472 | C. |
| March | 8.4 | 4.9 | 6.2 | 381 | C. |
| April | 8.4 | 1.0 | 3.6 | 214 | C. |
| May | 9 | 1.0 | 2.8 | 172 | C. |
| June | 31 | 4.0 | 17.5 | 1,040 | C. |
| July | 104 | 24 | 62.0 | 3,810 | C. |
| August | 90 | 4.0 | 42.0 | 2,580 | C. |
| September | 13 | 4.0 | 7.5 | 446 | C. |
| The year | 104 | 1.0 | 17.4 | 12,700 | |
| **1908–9.** | | | | | |
| October | 13 | 6.0 | 7.7 | 474 | C. |
| November | 6 | 4.0 | 4.7 | 280 | C. |
| December | 5 | 4.0 | 4.0 | 246 | C. |
| January | 9.5 | 3.8 | 4.96 | 305 | C. |
| February | 6.3 | 3.8 | 6.08 | 338 | C. |
| March | 5.0 | 1.8 | 3.52 | 216 | C. |
| April | 3.8 | 1.8 | 3.43 | 204 | C. |
| May | 83 | 3.8 | 16.8 | 1,030 | B. |
| June | 268 | 102 | 208 | 12,400 | B. |
| July | 318 | 68 | 172 | 10,600 | B. |
| August | 63 | 36 | 45.7 | 2,810 | B. |
| September | 40 | 9.0 | 20.5 | 1,220 | B. |
| The year | 318 | 1.8 | 41.4 | 30,100 | |

*Monthly discharge of Pine Creek near Round Valley, Cal., for 1903–1912*—Continued

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1909-10.** | | | | | |
| October | 13.4 | 5.0 | 10.2 | 627 | C. |
| November | 9.0 | 1.5 | 5.13 | 305 | C. |
| December | 9.0 | 5.8 | 8.77 | 539 | C. |
| January | 17 | 4.8 | 8.38 | 515 | C. |
| February | 8 | 4.8 | 6.17 | 343 | C. |
| March | 6.4 | 1.5 | 3.78 | 232 | C. |
| April | 24 | 1.5 | 7 | 417 | C. |
| May | 182 | 10 | 65.1 | 4,000 | C. |
| June | 277 | 68 | 192 | 11,400 | C. |
| July | 57 | 17 | 36.2 | 2,230 | C. |
| August | 20 | 3.8 | 8.22 | 505 | C. |
| September | 8 | 1.5 | 3.65 | 217 | C. |
| The year | 277 | 1.5 | 29.6 | 21,300 | |
| **1910-11.** | | | | | |
| October | 6.4 | 1.5 | 3.49 | 215 | C. |
| November | 5.5 | 1.2 | 3.36 | 200 | C. |
| December | 6.4 | 3.8 | 4.72 | 290 | C. |
| January | 62 | 4 | 10.0 | 615 | C. |
| February | 30 | 3 | 5.54 | 308 | B. |
| March | 23.5 | 4 | 6.72 | 413 | B. |
| April | 4 | 3 | 3.17 | 189 | B. |
| May | 53 | 2.3 | 17.8 | 1,090 | B. |
| June | 370 | 17.2 | 178 | 10,600 | B. |
| July | 322 | 148 | 256 | 15,700 | B. |
| August | 130 | 23.5 | 50.4 | 3,650 | B. |
| September | 20.5 | 5 | 10.6 | 631 | B. |
| The year | 370 | 1.2 | 46.6 | 33,900 | |
| **1911-12.** | | | | | |
| October | 45 | 6.8 | 12.2 | 750 | B. |
| November | 9.5 | 7.6 | 8.69 | 517 | B. |
| December | 8.2 | 5.5 | 6.73 | 414 | B. |
| January | 7.6 | 3.6 | 4.81 | 296 | B. |
| February | 4.8 | .0 | 3.14 | 181 | C. |
| March | 3.6 | .0 | 2.23 | 137 | C. |
| April | 2.6 | .4 | 1.43 | 85 | C. |
| May | 108 | .0 | 19.2 | 1,180 | C. |
| June | 113 | 24 | 64.8 | 3,860 | B. |
| The period | | | | 7,420 | |

NOTE.—Monthly means for June, July, and August, 1906, have been estimated and are only approximate

## OWENS RIVER CANAL NEAR BISHOP, CAL.

This station was established August 5, 1903. It was located at the footbridge near the quarter-section line which divides the N. ½ sec 27, T. 6 S., R. 32 E.

The channel is straight for 300 feet above and 100 feet below the station. The current is sluggish. The right bank is high and rocky and will not overflow. The left bank is low and will overflow. The bed of the stream is composed of gravel and is permanent.

Discharge measurements were made from the footbridge.

The gage was a vertical rod nailed to the bridge. No regular observer could be obtained, but the ditch tender read the rod when passing the station.

*Discharge measurements of Owens River canal near Bishop, Cal., in 1903–1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| July 30 | R. S. Hawley | | 30.0 | Nov. 1 | R. J. Taylor | 1.60 | 4.6 |
| Aug. 5 | do | 2.50 | 21.8 | | | | |
| 15 | do | 2.69 | 28.6 | 1905. | | | |
| 26 | do | 2.82 | 36.5 | Jan. 10 | R. J. Taylor | 1.55 | 4.5 |
| Sept. 7 | do | 2.89 | 33.1 | Feb. 4 | do | 1.49 | 3.3 |
| 15 | do | 3.02 | 39.5 | Apr. 6 | J. S. Evans | 2.40 | 28 |
| Oct. 28 | do | 2.57 | 28.2 | 24 | do | 2.77 | 42 |
| | | | | May 12 | do | 2.78 | 43 |
| 1904. | | | | June 1 | do | 2.62 | 38 |
| Feb. 3 | R. S. Hawley | 1.60 | 7.4 | July 7 | do | 2.30 | 32 |
| Mar. 4 | do | 2.90 | 44 | Aug. 4 | do | 2.75 | 43 |
| 21 | do | 2.60 | 34 | Sept. 11 | do | 2.60 | 34 |
| Apr. 21 | do | 2.90 | 46 | Oct. 24 | F. R. S. Buttemer | 2.38 | 28 |
| July 11 | J. C. Clausen and L. M. Barnes | 2.65 | 31 | Nov. 22 | do | 1.50 | 5.3 |
| Aug. 10 | L. M. Barnes | 2.80 | 40 | Dec. 13 | do | 1.63 | 7.7 |
| Sept. 5 | R. S. Hawley | 2.90 | 40 | | | | |
| Oct. 14 | R. S. Hawley, W. B. Clapp, and R. J. Taylor | 1.65 | 6.1 | | | | |

*Daily gage height, in feet, of Owens River canal near Bishop, Cal., for 1903–1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | | 2.9 | 11 | | 3.0 | 21 | | |
| 2 | | 2.9 | 12 | 2.8 | 3.0 | 22 | 2.85 | 3.0 |
| 3 | | 2.9 | 13 | 2.8 | 3.05 | 23 | 2.85 | 3.0 |
| 4 | | 2.95 | 14 | 2.8 | 3.05 | 24 | 2.85 | 3.0 |
| 5 | [a]2.5 | 2.95 | 15 | | 3.05 | 25 | 2.8 | 3.0 |
| 6 | 2.5 | | 16 | | 3.05 | 26 | 2.8 | 3.05 |
| 7 | 2.5 | 2.95 | 17 | 2.75 | 3.05 | 27 | 2.85 | 3.05 |
| 8 | | 2.9 | 18 | 2.8 | 3.05 | 28 | 2.85 | 3.05 |
| 9 | 2.7 | 2.9 | 19 | | 3.1 | 29 | 2.9 | |
| 10 | 2.75 | 2.95 | 20 | 2.8 | 3.1 | 30 | 2.9 | 3.1 |
| | | | | | | 31 | 2.9 | |

| Day. | Oct. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | |
| 1 | 3.1 | | | | | | | | |
| 2 | 3.1 | 1.6 | | | 2.9 | | | | 2.75 |
| 3 | 3.1 | 1.6 | | 2.6 | 2.9 | | | | |
| 4 | 3.1 | | 2.9 | | 2.9 | | | 2.65 | |
| 5 | 3.1 | | | | 2.9 | 2.7 | 2.6 | | 2.8 |
| 6 | 3.1 | | 2.7 | | 2.9 | | | 2.8 | 2.95 |
| 7 | 3.1 | | | | 2.9 | 2.7 | 2.6 | | 2.9 |
| 8 | 3.1 | | | 2.7 | | 2.6 | | | 3.0 |
| 9 | 3.1 | | | | 2.9 | | | | 3.0 |
| 10 | 2.7 | | | | 2.9 | | | | |
| 11 | | | | | 2.9 | | 2.65 | 2.7 | |
| 12 | | | | 2.75 | | | | | |
| 13 | | | | 2.80 | 2.9 | 2.6 | | | 3.0 |
| 14 | | | | 2.85 | | | | | |
| 15 | | | | 2.85 | | 2.4 | | 2.7 | |
| 16 | | | | | 2.9 | | | | |
| 17 | | | | 2.85 | 2.9 | | | | 3.05 |
| 18 | | | | | 2.9 | | | | |
| 19 | | | | 2.85 | | | | | |
| 20 | | | | 2.80 | 2.9 | | | 2.8 | 3.05 |
| 21 | | | 2.6 | 2.9 | 2.9 | | | | |
| 22 | | | | 2.9 | | 2.6 | | | |
| 23 | | | | | 2.9 | | | | |
| 24 | | | | 2.9 | 2.9 | | | | |
| 25 | | | | | 2.9 | | | 2.8 | |

[a] Lowest water known in 24 years.

NOTE.—From Oct. 10 no daily record was kept, but beginning Oct. 11 the gage read about 1.60 until Oct. 24; the water was then all turned out.

[illegible] gage height, [illegible] Owens River canal near Bishop, Cal., for 1903-1905—Co[illegible]

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | |
| | | | ... | 2.9 | ... | | 2.7 | ... | |
| | | | | 2.9 | ... | 2.5 | 2.75 | ... | |
| | | | 2.7 | 2.9 | 2.7 | ... | | ... | |
| | | | | ... | ... | | 2.6 | ... | |
| | | | [illegible] | ... | ... | ... | ... | ... | |

| Day. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | |
| | | | 2.7 | 2.55 | 2.6 | 2.55 | |
| | | | 2.7 | 2.55 | 2.75 | 2.55 | |
| | | | 2.7 | 2.55 | 2.8 | 2.55 | |
| | | 2.4 | ...... | 2.55 | 2.75 | 2.55 | |
| | | 2.7 | 2.65 | 2.55 | 2.8 | 2.55 | |
| | | 2.7 | 2.65 | 2.55 | 2.85 | 2.75 | |
| | | 2.7 | 2.6 | 2.55 | 2.9 | 2.8 | |
| | | 2.65 | 2.6 | 2.55 | 2.85 | 2.8 | |
| | | 2.7 | ...... | 2.55 | 2.85 | 2.8 | |
| | | 2.5 | ...... | 2.55 | 2.9 | 2.8 | |
| | | 2.7 | 2.65 | 2.55 | 2.9 | 2.75 | |
| | | 2.8 | 2.7 | 2.55 | 2.5 | 2.8 | |
| | | 2.8 | 2.65 | 2.55 | 2.5 | 2.8 | |
| | ...... | ...... | 2.7 | 2.55 | 2.5 | 2.8 | |
| | ...... | 2.75 | 2.55 | 2.55 | 2.5 | 2.75 | ... |
| | | 2.8 | 2.55 | 2.55 | 2.5 | 2.8 | ... |
| | ...... | 2.75 | 2.55 | 2.5 | [illegible] | 2.75 | ... |
| | ...... | 2.75 | 2.55 | 2.65 | [illegible] | 2.6 | ... |
| | ...... | 2.7 | 2.5 | 2.7 | [illegible] | 2.6 | ... |
| | ...... | 2.75 | 2.5 | 2.7 | 2.6 | 2.6 | ... |
| | ...... | 2.75 | 2.5 | 2.65 | 2.6 | 2.6 | ... |
| | ...... | 2.7 | 2.55 | 2.65 | [illegible] | 2.6 | ... |
| | ...... | 2.65 | 2.55 | 2.7 | [illegible] | 2.6 | ... |
| | ...... | 2.65 | 2.55 | 2.7 | 2.6 | 2.6 | ... |
| | ...... | 2.7 | 2.55 | 2.7 | 2.6 | 2.65 | ... |
| | 2.8 | 2.7 | 2.55 | 2.7 | 2.8 | 2.65 | ... |
| | 2.8 | 2.75 | 2.55 | 2.7 | 2.85 | 2.7 | ... |
| | ...... | ...... | 2.55 | 2.75 | 2.85 | 2.65 | |
| | ...... | ...... | 2.55 | 2.7 | 2.9 | 2.5 | ... |
| | 2.65 | 2.7 | 2.55 | 2.8 | 2.85 | 2.8 | ... |
| | ...... | 2.7 | ...... | 2.75 | 2.85 | ...... | |

[illegible] Oct. 24, 1903, to Feb. 1, 1904, Feb. 16 to Mar. 3, 1904, Sept. 21 to De[illegible] [illegible] record for other days for which no gage height is given.

*Rating tables for Owens River canal near Bishop, Cal.*

**January 1 to June 30, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| Feet. | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. |
| [illegible] | 7 | 2.00 | 15 | 2.40 | [illegible] | [illegible] | 42 |
| [illegible] | 9 | 2.10 | 18 | 2.50 | [illegible] | [illegible] | 46 |
| [illegible] | 11 | 2.20 | 20 | 2.60 | [illegible] | [illegible] | [illegible] |
| [illegible] | 13 | 2.30 | 23 | 2.70 | [illegible] | [illegible] | 54 |

**July 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | 5 | 2.00 | 13 | 2.40 | [illegible] | [illegible] | [illegible] |
| [illegible] | 6 | 2.10 | [illegible] | 2.50 | [illegible] | [illegible] | [illegible] |
| [illegible] | 8 | 2.20 | [illegible] | 2.60 | [illegible] | [illegible] | 46 |
| [illegible] | 11 | 2.30 | [illegible] | 2.70 | [illegible] | | |

*Monthly discharge of Owens River canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| February | 7 | 0 | 3.4 | 196 |
| March | 46 | 0 | 33 | 2,029 |
| April | 46 | 34 | 41.4 | 2,464 |
| May | 46 | 38 | 45 | 2,767 |
| June | 38 | 31 | 33.5 | 1,993 |
| July | 37 | 27 | 33 | 2,029 |
| August | 37 | 32 | 35 | 2,152 |
| September 1-20 | 47 | 35 | 43 | 1,706 |
| The period | | | | 15,336 |

NOTE.—Discharge interpolated for missing days.

## BISHOP CREEK CANAL NEAR BISHOP, CAL.

This station was established August 5, 1903. It was located at the footbridge below the waste gate near the house of A. Fitzgerald, 3½ miles northwest of Bishop.

The channel is straight for 50 feet above and 100 feet below this station. The current is swift. The right bank is high and the left bank is low. Neither bank is liable to overflow. The bed of the stream is composed of sand and gravel and is fairly permanent.

Discharge measurements were made from the footbridge.

The gage was a vertical rod fastened to the bridge anchor.

*Discharge measurements of Bishop Creek canal near Bishop, Cal., in 1903–1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| July 30 | R. S. Hawley | ...... | 101 | Aug. 10 | L. M. Barnes | 2.00 | 26 |
| Aug. 5 | ....do | 3.0 | 72 | Sept. 5 | R. S. Hawley | 4.10 | 118 |
| 15 | ....do | 2.89 | 61 | 1905. | | | |
| 26 | ....do | 3.25 | 84 | Mar. 17 | R. J. Taylor | 1.40 | 8.5 |
| Sept. 5 | ....do | 3.17 | 81 | Apr. 6 | J. S. Evans | 2.80 | 62 |
| 15 | ....do | 3.31 | 82 | 24 | ....do | 3.81 | 105 |
| Oct. 23 | ....do | 1.97 | 27 | May 12 | ....do | 3.95 | 108 |
| | | | | June 1 | ....do | 4.00 | 105 |
| 1904. | | | | July 7 | ....do | 3.70 | 77 |
| Feb. 11 | R. S. Hawley | 2.43 | 54 | Aug. 4 | ....do | 4.10 | 122 |
| Mar. 21 | ....do | 1.75 | 22 | Sept. 11 | ....do | 3.85 | 97 |
| Apr. 13 | ....do | 3.69 | 116 | Oct. 24 | F. R. S. Buttemer | 1.92 | 29 |
| 21 | ....do | 3.62 | 113 | Nov. 22 | ....do | 1.05 | 1.8 |
| May 14 | ....do | 3.55 | 109 | Dec. 13 | ....do | 1.06 | 1.6 |
| June 16 | ....do | 1.90 | 30 | 21 | ....do | 1.21 | 12.4 |
| 11 | Clausen and Barnes | 3.20 | 94 | | | | |

*Daily gage height, in feet, of Bishop Creek canal near Bishop, Cal., for 1903–1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | | | 11 | 3.1 | | 21 | | 3.3 |
| 2 | | 3.15 | 12 | | | 22 | 3.1 | 3.3 |
| 3 | | 3.15 | 13 | | | 23 | | 3.3 |
| 4 | | | 14 | 3.1 | | 24 | | 3.4 |
| 5 | 3.0 | 3.15 | 15 | 2.9 | 3.3 | 25 | | 3.4 |
| 6 | 3.1 | | 16 | | 3.3 | 26 | 3.25 | 3.4 |
| 7 | | | 17 | | 3.25 | 27 | | 3.4 |
| 8 | 3.1 | 3.3 | 18 | 3.1 | 3.25 | 28 | | 3.4 |
| 9 | | | 19 | 3.0 | 3.3 | 29 | | |
| 10 | 3.1 | 3.3 | 20 | | 3.3 | 30 | | |
| | | | | | | 31 | | |

*Daily gage height, in feet, of Bishop Creek canal near Bishop, Cal., for 1903–1905*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | | | | | | |
| 1 | | | | | | [illegible] | [illegible] | [illegible] | |
| 2 | | | | | | [illegible] | [illegible] | [illegible] | |
| 3 | | | | | [illegible] | [illegible] | [illegible] | [illegible] | |
| 4 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 5 | | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | | 1.6 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | | | | [illegible] | [illegible] | | [illegible] | | |
| 12 | | | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | | 1.6 | | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 14 | | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 16 | | 1.6 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | | | | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 19 | | 1.6 | | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 20 | | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | | | [illegible] | | [illegible] | [illegible] | [illegible] | | [illegible] |
| 22 | | | | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 23 | | 1.6 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | | | | | | [illegible] | | [illegible] | [illegible] |
| 25 | | | | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 26 | | | | [illegible] | [illegible] | | [illegible] | | |
| 27 | | | | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 28 | | | | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 29 | | | | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 30 | | | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| 31 | | | | | | | [illegible] | | |

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1905. | | | 1905. | | | 1905. | | |
| 1 | | | 11 | 3.5 | 3.[illegible] | 21 | | 2.9 |
| 2 | | | 12 | 3.5 | 3.[illegible] | 22 | 3.5 | 2.9 |
| 3 | | 4.1 | 13 | 3.5 | 3.[illegible] | 23 | | 2.9 |
| 4 | | 4.1 | 14 | 3.5 | 3.[illegible] | 24 | 3.5 | |
| 5 | | 4.[illegible] | 15 | 3.5 | 3.5 | 25 | 4.0 | |
| 6 | 3.[illegible] | 3.[illegible] | 16 | 3.5 | 3.[illegible] | 26 | 4.1 | |
| 7 | 3.[illegible] | 3.[illegible] | 17 | 3.5 | 2.9 | 27 | | |
| 8 | 3.[illegible] | 3.[illegible] | 18 | 3.5 | 2.9 | 28 | | |
| 9 | 3.[illegible] | 3.[illegible] | 19 | 3.5 | 2.9 | 29 | | |
| 10 | 3.5 | 3.[illegible] | 20 | 3.5 | 2.9 | 30 | | |
| | | | | | | 31 | | |

NOTE.—Canal dry from Oct. 30, 1903, to Feb. 1, 1904, Feb. 24 to Mar. 31, 1904, and Oct. 1 to Dec. 31, 1904. No record for days when gage heights are not given, but the flow was fairly constant at a gage height of 3.4 feet from Sept. 30 to Oct. [illegible], 1903, and at a height of 2.0 feet from Oct. [illegible] to Oct. [illegible], 1903.

*Rating table for Bishop Creek canal near Bishop, Cal., from Feb. 1 to Oct. 1, 1904.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.60 | 15 | 2.30 | 48 | 3.00 | 81 | 3.70 | 116 |
| 1.70 | 20 | 2.40 | 53 | 3.10 | 86 | 3.80 | 121 |
| 1.80 | 24 | 2.50 | 57 | 3.20 | 91 | 3.90 | 126 |
| 1.90 | 29 | 2.60 | 62 | 3.30 | 96 | 4.00 | 131 |
| 2.00 | 33 | 2.70 | 67 | 3.40 | 101 | 4.10 | 136 |
| 2.10 | 38 | 2.80 | 72 | 3.50 | 106 | 4.20 | 141 |
| 2.20 | 43 | 2.90 | 76 | 3.60 | 111 | | |

*Monthly discharge of Bishop Creek canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| February | 55 | 0 | 26.5 | 1,524 |
| March | 22 | 0 | 7.8 | 480 |
| April | 116 | 20 | 83.1 | 4,945 |
| May | 121 | 91 | 103.4 | 6,359 |
| June | 106 | 20 | 42.1 | 2,505 |
| July | 121 | 62 | 99 | 6,087 |
| August | 126 | 33 | 85 | 5,226 |
| September | 136 | 101 | 123 | 7,319 |
| The period | | | | 34,445 |

NOTE.—Discharge interpolated for days on which the gage was not read.

## FARMERS CANAL NEAR BISHOP, CAL.

This station was established August 6, 1903, It was located at the footbridge near the house of Robert Love and 3 miles north of Bishop, Cal.

The channel is straight for 300 feet above and 50 feet below the station. The current is sluggish. Both banks are low and are liable to overflow. The bed of the stream is sandy and shifting.

Discharge measurements were made from the footbridge, to which the gage is attached.

The gage was a vertical rod fastened to the bridge pier.

*Discharge measurements of Farmers canal near Bishop, Cal., in 1903–1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| July 31 | R. S. Hawley | | 13.9 | Oct. 14 | Hawley, Clapp, and Taylor. | 2.41 | 8.1 |
| Aug. 6 | do | 2.4 | 7.0 | | | | |
| 17 | do | 2.7 | 14.2 | Nov. 1 | R. J. Taylor | 2.40 | 8.1 |
| 25 | do | 2.5 | 10.7 | Dec. 1 | do | 2.30 | 7.2 |
| Sept. 3 | do | 2.42 | 9.7 | 1905. | | | |
| 14 | do | 2.58 | 10.4 | Jan. 10 | R. J. Taylor | 2.20 | 6.2 |
| Oct. 23 | do | 2.55 | 16.2 | Feb. 4 | do | 2.16 | 7.0 |
| Nov. 27 | do | 2.54 | 16.0 | Mar. 7 | do | 2.90 | 30 |
| 1904. | | | | Apr. 6 | J. S. Evans | 2.55 | 18.8 |
| Feb. 3 | R. S. Hawley | 2.55 | 15.5 | 24 | do | 2.30 | 5.4 |
| Apr. 2 | do | 2.35 | 11.3 | May 12 | do | 2.60 | 14.9 |
| 20 | do | 2.60 | 17.0 | June 1 | do | 2.60 | 20 |
| May 14 | do | 2.83 | 27.0 | July 7 | do | 2.75 | 24 |
| June 16 | do | 3.02 | 22.0 | Aug. 4 | do | 2.00 | 4.8 |
| July 11 | Clausen and Barnes | 2.55 | 15.0 | Sept. 11 | do | 2.55 | 16.4 |
| 30 | L. M. Barnes | 3.05 | 24.0 | Nov. 22 | F. R. S. Buttemer | 2.35 | 7.6 |
| Aug. 25 | do | 3.05 | 26.0 | Dec. 13 | do | 2.36 | 6.4 |
| Sept. 6 | R. S. Hawley | 2.80 | 21.0 | | | | |

*Daily gage height, in feet, of Farmers canal near Bishop, Cal., for 1903–1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | | 2.40 | 11 | 2.60 | | 21 | | 2.85 |
| 2 | | 2.40 | 12 | 2.67 | 2.68 | 22 | 2.50 | 2.83 |
| 3 | | 2.43 | 13 | 2.75 | 2.57 | 23 | 2.50 | |
| 4 | | 2.40 | 14 | | 2.60 | 24 | 2.55 | 2.87 |
| 5 | | 2.45 | 15 | | 2.60 | 25 | 2.50 | |
| 6 | | 245. | 16 | 2.70 | 2.63 | 26 | 2.50 | 2.90 |
| 7 | 2.40 | 2.50 | 17 | 2.70 | | 27 | 2.55 | 2.93 |
| 8 | 2.33 | 2.58 | 18 | 2.68 | 2.67 | 28 | 2.50 | 2.90 |
| 9 | 2.40 | 2.67 | 19 | | 2.80 | 29 | | |
| 10 | 2.60 | 2.65 | 20 | 2.50 | 2.82 | 30 | 2.45 | 2.92 |
| | | | | | | 31 | | |

[illegible]

*Rating tables for Farmers canal near Bishop, Cal.*

January 1 to May 31, 1904.

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 2.00 | 4 | 2.30 | 10 | 2.60 | 18 | 2.90 | 30 |
| 2.10 | 6 | 2.40 | 12 | 2.70 | 21 | 3.00 | 35 |
| 2.20 | 8 | 2.50 | 15 | 2.80 | 25 | 3.10 | 40 |

June 1 to December 31, 1904.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.10 | 3 | 2.40 | 8 | 2.70 | 15 | 3.00 | 23 |
| 2.20 | 5 | 2.50 | 10 | 2.80 | 18 | 3.10 | 26 |
| 2.30 | 6 | 2.60 | 13 | 2.90 | 21 | 3.20 | 29 |

*Monthly discharge of Farmers canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| January | 16 | 15 | 15.3 | 941 |
| February | 16 | 15 | 15.2 | 874 |
| March | 10 | 10 | 10 | 615 |
| April | 30 | 0 | 10.2 | 607 |
| May | 32 | 6 | 18.8 | 1,156 |
| June | 26 | 13 | 21 | 1,250 |
| July | 25 | 10 | 16 | 984 |
| August | 28 | 23 | 26 | 1,599 |
| September | 26 | 13 | 19 | 1,131 |
| October | 12 | 7 | 9 | 553 |
| November | 8 | 6 | 6 | 357 |
| December | 6 | 4 | 5.7 | 350 |
| The year | 32 | 0 | 14.4 | 10,417 |

NOTE.—Discharge interpolated on days for which no gage height is given.

## McNALLY CANAL NEAR BISHOP, CAL.

This station was established July 31, 1903. It was located at the head of the canal, 3¾ miles north of Bishop, Cal.

The channel is straight for 50 feet below the gage. The current is swift. Both banks are high and will not overflow. The bed of the stream is rocky and permanent.

Discharge measurements were made from a footbridge.

The gage was a vertical board fastened to the headworks of the canal. No regular gage reader could be obtained for this station.

*Discharge measurements of McNally canal near Bishop, Cal., in 1903-1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| July 31 | R. S. Hawley | 1.40 | 66 | Aug. 25 | L. M. Barnes | 1.70 | 50 |
| Aug. 6 | ....do | 1.40 | 66 | Sept. 5 | R. S. Hawley | 1.75 | 46 |
| 17 | ....do | 1.36 | 63 | 1905. | | | |
| 25 | ....do | 1.25 | 54 | Mar. 17 | R. J. Taylor | .50 | 11.9 |
| Sept. 4 | ....do | 1.25 | 52 | Apr. 6 | J. S. Evans | .70 | 25 |
| 14 | ....do | 1.26 | 52 | 24 | ....do | 1.00 | 38 |
| 21 | ....do | 1.10 | 40 | May 12 | ....do | 1.06 | 43 |
| 1904. | | | | June 1 | ....do | 1.10 | 56 |
| Apr. 2 | R. S. Hawley | .80 | 29 | July 7 | ....do | 1.30 | 86 |
| 20 | ....do | 1.37 | 68 | Aug. 4 | ....do | 1.50 | 53 |
| May 14 | ....do | 1.52 | 83 | Sept. 11 | ....do | 1.10 | 50 |
| July 11 | Clausen and Barnes | 1.55 | 81 | Nov. 22 | F. R. S. Buttemer | .70 | 20 |
| 20 | L. M. Barnes | 1.90 | 81 | Dec. 13[a] | ....do | .10 | 0 |

[a] Headgate shut down; no water flowing in canal.

*Daily gage height, in feet, of McNally canal near Bishop, Cal., for 1904.*

| Day. | Apr. | May. | June. | July. | Day. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 1.80 | 1.60 | 16 | | | | 1.90 |
| 2 | 0.80 | | | | 17 | | | | 2.00 |
| 3 | | | 1.80 | | 18 | | | | 2.10 |
| 4 | | | | | 19 | | | | |
| 5 | | | | | 20 | 1.35 | | | |
| 6 | | | 1.70 | | 21 | | | | |
| 7 | | | 1.80 | | 22 | | | | |
| 8 | .90 | | | | 23 | | | | |
| 9 | | | 1.70 | | 24 | | | | |
| 10 | | | | | 25 | | | | |
| 11 | | | 1.30 | 1.55 | 26 | | | 1.40 | |
| 12 | | | 1.50 | | 27 | | | | |
| 13 | | | | 1.90 | 28 | | | | |
| 14 | | 1.22 | 1.60 | | 29 | | | | |
| 15 | | | 1.50 | 1.60 | 30 | | | | 1.90 |
| | | | | | 31 | | | | |

NOTE.—Canal was dry during January, February, March, October, November, and December, 1904. No record during August and September, 1904.

*Rating tables for McNally canal near Bishop, Cal.*

**April 1 to July 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.70 | 22 | 1.10 | 50 | 1.50 | 78 | 1.90 | 106 |
| .80 | 29 | 1.20 | 57 | 1.60 | 85 | 2.00 | 113 |
| .90 | 36 | 1.30 | 64 | 1.70 | 92 | 2.10 | 120 |
| 1.00 | 43 | 1.40 | 71 | 1.80 | 99 | | |

**August 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.40 | 10 | 1.60 | 30 | 1.80 | 62 |
| 1.50 | 20 | 1.70 | 46 | 1.90 | 82 |

*Monthly discharge of McNally canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| April | 65 | 29 | 50.6 | 3,007 |
| May | | | 80 | 4,919 |
| June | 90 | 64 | 80 | 4,760 |
| July | 120 | 83 | 100 | 6,148 |
| The period | | | | 18,834 |

NOTE.—Discharge interpolated for days on which gage was not read.

## GEORGE COLLINS'S CANAL NEAR BISHOP, CAL.

This station was established August 17, 1903. It was located at the footbridge 3 miles east and half a mile north of Bishop.

The channel is straight for 75 feet above and for 50 feet below the station. The current is sluggish. The right bank is low and the left bank is high. Neither bank is liable to overflow. The bed of the stream is composed of sand and is fairly permanent.

Discharge measurements were made from the bridge.

' gage was a vertical rod fastened to the bridge near the house hur Wines.

*Discharge measurements of George Collins's canal near Bishop, Cal., in 1903–1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| July 31 | R. S. Hawley | ........ | 4.9 | Oct. 10 | Hawley and Taylor | 1.03 | 1.8 |
| Aug. 11 | .....do | ........ | 5.6 | Nov. 1 | R. J. Taylor | .80 | .7 |
| 17 | .....do | 1.00 | 6.3 | | | | |
| 27 | .....do | 1.01 | 6.0 | 1905. | | | |
| Sept. 7 | .....do | .94 | 5.5 | May 2 | J. S. Evans | 1.10 | 12.1 |
| 14 | .....do | .98 | 5.5 | 25 | .....do | 1.35 | 14 |
| Oct. 23 | .....do | .60 | 2.8 | June 28 | .....do | 1.00 | 5.2 |
| 1904. | | | | July 26 | .....do | 1.00 | 5.9 |
| | | | | Aug. 9 | .....do | .60 | 4.0 |
| Feb. 4 | R. S. Hawley | .30 | 1.5 | Sept. 5 | .....do | .60 | 4.8 |
| Apr. 2 | .....do | 1.20 | 11.1 | 14 | .....do | .50 | 5.2 |
| 14 | .....do | .70 | 4.2 | Oct. 3 | .....do | .65 | 8.8 |
| June 8 | .....do | 1.58 | 14.0 | 25 | F. R. S. Buttemer | .78 | 3.4 |
| July 12 | Clausen and Barnes | 1.50 | 9.6 | Nov. 23 | .....do | .82 | 3.4 |
| Aug. 6 | L. M. Barnes | 1.50 | 9.7 | Dec. 11 | .....do | .80 | 2.5 |
| 20 | .....do | 1.55 | 9.3 | | | | |

*Daily gage height, in feet, of George Collins's canal near Bishop, Cal., for 1903–1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | ........ | 1.03 | 11 | ........ | 0.95 | 21 | 0.70 | 1.35 |
| 2 | ........ | .98 | 12 | ........ | .92 | 22 | .73 | 1.35 |
| 3 | ........ | .97 | 13 | ........ | .93 | 23 | .70 | 1.35 |
| 4 | ........ | .98 | 14 | ........ | .95 | 24 | .90 | 1.35 |
| 5 | ........ | .97 | 15 | ........ | .95 | 25 | .90 | 1.35 |
| 6 | ........ | .98 | 16 | 1.00 | .95 | 26 | .90 | 1.35 |
| 7 | ........ | .97 | 17 | .98 | .95 | 27 | .97 | 1.35 |
| 8 | ........ | .95 | 18 | .92 | .97 | 28 | 1.03 | 1.20 |
| 9 | ........ | .95 | 19 | .93 | .95 | 29 | 1.02 | 1.20 |
| 10 | ........ | .95 | 20 | .92 | 1.35 | 30 | 1.03 | 1.20 |
| | | | | | | 31 | 1.04 | ........ |

| Day. | Oct. | Nov. | Dec. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | |
| 1 | 0.95 | 0.75 | 0.75 | ........ | 0.2 | 1.3 | 0.6 | 1.5 | 1.3 | 1.5 | 1.55 |
| 2 | .95 | .75 | .75 | ........ | .2 | 1.3 | .6 | 1.5 | 1.3 | ........ | ........ |
| 3 | .95 | .75 | .75 | ........ | .2 | 1.3 | .6 | 1.5 | 1.3 | 1.5 | 1.49 |
| 4 | .95 | .75 | .75 | ........ | .2 | 1.2 | .6 | 1.6 | ........ | ........ | 1.1 |
| 5 | .95 | .75 | .70 | ........ | .2 | 1.2 | .6 | ........ | 1.3 | ........ | ........ |
| 6 | .95 | .70 | .65 | ........ | .2 | 1.2 | .7 | ........ | ........ | 1.5 | .5 |
| 7 | .95 | .70 | .65 | ........ | ........ | 1.2 | .7 | ........ | 1.4 | ........ | ........ |
| 8 | .95 | .70 | .65 | ........ | ........ | 1.2 | .6 | 1.6 | 1.4 | 1.3 | 1.0 |
| 9 | .95 | .70 | .65 | ........ | ........ | .9 | .6 | ........ | 1.4 | ........ | 1.4 |
| 10 | .95 | .70 | .65 | ........ | ........ | .9 | .8 | 1.6 | ........ | 1.5 | ........ |
| 11 | .95 | .75 | .65 | 0.2 | ........ | .9 | .8 | 1.6 | 1.4 | ........ | 1.5 |
| 12 | .80 | .75 | .65 | .2 | ........ | .9 | 1.1 | 1.5 | ........ | 1.5 | ........ |
| 13 | .80 | .75 | .63 | .2 | ........ | .7 | 1.3 | 1.6 | 1.35 | ........ | 1.5 |
| 14 | .80 | .75 | .62 | .2 | ........ | .7 | 1.3 | ........ | ........ | 1.5 | ........ |
| 15 | .80 | .75 | .63 | .2 | ........ | .7 | 1.6 | 1.5 | 1.3 | ........ | 1.3 |
| 16 | .80 | .75 | .62 | .3 | ........ | .7 | 1.6 | ........ | ........ | 1.5 | 1.1 |
| 17 | .80 | .50 | .63 | .6 | .2 | .8 | 1.6 | 1.6 | 1.3 | ........ | 1.1 |
| 18 | .80 | .50 | .60 | .3 | .3 | .8 | 1.6 | ........ | ........ | 1.6 | 1.4 |
| 19 | .80 | .50 | .60 | .2 | .2 | .9 | 1.6 | 1.5 | 1.2 | ........ | ........ |
| 20 | .80 | .50 | .60 | .2 | .2 | 1.0 | 1.6 | ........ | ........ | 1.5 | 1.4 |
| 21 | .85 | .55 | ........ | .2 | ........ | 1.0 | 1.6 | 1.6 | .8 | ........ | 1.4 |
| 22 | .85 | .55 | ........ | .3 | ........ | 1.0 | 1.5 | ........ | ........ | 1.5 | ........ |
| 23 | .75 | .55 | ........ | .3 | .5 | 1.1 | 1.4 | 1.5 | 1.2 | ........ | 1.5 |
| 24 | .75 | .55 | ........ | .6 | .3 | 1.1 | 1.5 | ........ | ........ | 1.55 | ........ |
| 25 | .75 | .55 | ........ | .5 | .3 | 1.2 | 1.5 | 1.5 | 1.5 | ........ | ........ |
| 26 | .75 | .55 | ........ | .5 | 1.4 | 1.1 | 1.5 | 1.5 | ........ | 1.5 | ........ |
| 27 | .75 | .62 | ........ | .3 | 1.43 | 1.1 | 1.6 | 1.5 | 1.5 | ........ | ........ |
| 28 | .75 | .70 | ........ | .4 | 1.4 | 1.0 | 1.6 | 1.4 | ........ | ........ | ........ |
| 29 | .75 | .70 | ........ | .4 | 1.4 | .8 | 1.6 | 1.4 | 1.55 | 1.5 | ........ |
| 30 | .75 | .85 | ........ | ........ | 1.4 | .6 | 1.6 | 1.3 | 1.5 | ........ | 1.2 |
| 31 | .75 | ........ | ........ | ........ | 1.3 | ........ | 1.6 | ........ | 1.5 | 1.55 | ........ |

*Daily gage height, in feet, of George Collins's canal near Bishop, Cal., for 1904–1905—Continued.*

| Day. | Oct. | May. | June. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | |
| 1 | 1.0 | ...... | 0.9 | ...... | 0.8 | ...... | 1.0 |
| 2 | ...... | 0.9 | 1.0 | ...... | .8 | 0.9 | .9 |
| 3 | 1.3 | ...... | 1.0 | 0.9 | ...... | .9 | ...... |
| 4 | 1.3 | .9 | ...... | ...... | ...... | ...... | .9 |
| 5 | ...... | ...... | 1.0 | ...... | .5 | .9 | ...... |
| 6 | 1.6 | ...... | 1.0 | .9 | ...... | ...... | .9 |
| 7 | ...... | 1.0 | 1.2 | .9 | .5 | .9 | ...... |
| 8 | ...... | ...... | 1.5 | ...... | ...... | ...... | ...... |
| 9 | ...... | .9 | 1.5 | 1.4 | .5 | 1.2 | ...... |
| 10 | ...... | ...... | 1.4 | ...... | .5 | ...... | ...... |
| 11 | .7 | .9 | .9 | 1.4 | ...... | 1.2 | ...... |
| 12 | ...... | ...... | 1.5 | 1.4 | ...... | 1.2 | ...... |
| 13 | .6 | ...... | 1.6 | ...... | .9 | ...... | ...... |
| 14 | ...... | .9 | 1.6 | 1.4 | .9 | ...... | ...... |
| 15 | ...... | 1.6 | 1.4 | ...... | ...... | 1.2 | ...... |
| 16 | 1.0 | 1.0 | 1.4 | 1.2 | ...... | ...... | ...... |
| 17 | .9 | 1.0 | 1.4 | 1.2 | 0.9 | ...... | ...... |
| 18 | .6 | 1.0 | 1.5 | ...... | .9 | 1.2 | ...... |
| 19 | ...... | 1.0 | 1.4 | ...... | ...... | ...... | ...... |
| 20 | ...... | 1.0 | ...... | 1.0 | ...... | 1.2 | ...... |
| 21 | ...... | ...... | 1.0 | ...... | .9 | 1.1 | ...... |
| 22 | ...... | 1.0 | 1.0 | 1.0 | ...... | ...... | ...... |
| 23 | ...... | ...... | ...... | ...... | .8 | 1.1 | ...... |
| 24 | ...... | 1.0 | .9 | ...... | .8 | 1.1 | ...... |
| 25 | ...... | ...... | .9 | ...... | ...... | ...... | ...... |
| 26 | ...... | ...... | 1.0 | .9 | ...... | 1.0 | ...... |
| 27 | ...... | .6 | ...... | ...... | .9 | ...... | ...... |
| 28 | ...... | .5 | ...... | ...... | ...... | 1.0 | ...... |
| 29 | ...... | .5 | .8 | .9 | .9 | ...... | ...... |
| 30 | ...... | .6 | .8 | ...... | .9 | ...... | ...... |
| 31 | ...... | ...... | ...... | ...... | ...... | ...... | ...... |

NOTE.—Canal was dry from Dec. 21, 1903, to Feb. 10, 1904; Mar. 7–16, 21–22, 1904; Oct. 17 to Dec. 31, 1904, and Oct. 6 to Dec. 31, 1905. No record for other days for which gage heights are not given.

*Rating tables for George Collins's canal near Bishop, Cal.*

**January 1 to June 30, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 0.30 | 1 | 0.70 | 5 | 1.10 | 9 | 1.40 | 12 |
| .40 | 2 | .80 | 6 | 1.20 | 10 | 1.50 | 13 |
| .50 | 3 | .90 | 7 | 1.30 | 11 | 1.60 | 15 |
| .60 | 4 | 1.00 | 8 | | | | |

**July 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 0.80 | 0 | 1.10 | 3 | 1.30 | 6 | 1.50 | 9 |
| .90 | 1 | 1.20 | 4 | 1.40 | 7 | 1.60 | 11 |
| 1.00 | 2 | | | | | | |

*Monthly discharge of George Collins's canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). |
|---|---|---|---|---|
| February | 4 | 0 | 1.1 | 63 |
| March | 12 | 0 | 2.7 | 166 |
| April | 11 | 4 | 7.9 | 470 |
| May | 15 | 4 | 10.5 | 646 |
| June | 15 | 12 | 13.7 | 815 |
| July | 10 | 0 | 6 | 369 |
| August | 11 | 6 | 9 | 553 |
| September | 13 | 0 | 6 | 357 |
| October 1-20 | 11 | 0 | 3 | 119 |
| The period | ......... | ......... | ......... | 3,558 |

NOTE.—Discharge interpolated on days for which there is no record.

### BISHOP CREEK NEAR BISHOP, CAL.

This station, which was located at the wagon bridge on the Bishop road, about 4 miles southeast of Bishop and 2 miles below the mouth of Bishop Creek canyon, in sec. 9, T. 7 S., R. 32 E., was established August 9, 1903, and discontinued February 28, 1911.

The North Hillside, South Hillside, and Power canals head above the station. The amount of water in these canals is independent of the stage of the creek and depends on gate regulation. No record has been made of the amount diverted by the canals. The drainage area above the mouth of Bishop Creek canyon is approximately 63 square miles.

The gage is a vertical staff on the right bank at the bridge.

Discharge measurements were made from the bridge at the gage.

From May to August, 1907, daily flow was determined from readings on a 30-foot weir located 3 miles above the mouth of the canyon and above all diversions.

On June 25, 1909, the Nevada-California Power Co.'s equalizing dam at intake No. 2 went out and the bridge was carried away. The gage was left intact, but it was removed August 15, 1909, in building a new bridge. The bridge was completed August 23, and a new gage put in August 31 at approximately the original datum.

During the intervening time readings were taken from a temporary gage the datum of which was approximately the same as that of the old gage.

Both banks of the stream are high and the current is swift. The channel is rocky and is fairly permanent.

*Discharge measurements of Bishop Creek near Bishop, Cal., in 1903–1906.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* |
| Aug. 9 | R. S. Hawley | 2.45 | 121 |
| 19 | .....do | 2.17 | 95 |
| 25 | .....do | 2.20 | 96 |
| Sept. 3 | .....do | 1.99 | 67 |
| 7 | .....do | 1.80 | 52 |
| 15 | .....do | 1.65 | 40 |
| 21 | .....do | 1.60 | 38 |
| Oct. 24 | .....do | 1.39 | 27 |
| Nov. 20 | .....do | 1.41 | 26 |
| Dec. 26 | .....do | 1.35 | 25 |
| 1904. | | | |
| Jan. 23 | R. S. Hawley | 1.40 | 30 |
| Feb. 20 | .....do | 1.50 | 33 |
| Mar. 14 | .....do | 1.65 | 42 |
| Apr. 8 | Murphy, Bennett, and Hawley | 1.60 | 34 |
| 25 | R. S. Hawley | 2.05 | 75 |
| 30 | .....do | 2.00 | 67 |
| May 17 | .....do | 2.96 | 180 |
| June 8 | .....do | 3.65 | 342 |
| July 12 | Clausen and Barnes | 3.00 | 197 |
| Aug. 8 | L. M. Barnes | 3.30 | 240 |
| Sept. 7 | R. S. Hawley | 2.10 | 74 |
| Oct. 15 | Hawley, Clapp, and Taylor | 2.30 | 95 |
| Nov. 9 | R. J. Taylor | 1.75 | 49 |
| Dec. 5 | .....do | 1.39 | 20 |
| 1905. | | *Feet.* | *Sec.-ft.* |
| Jan. 11 | R. J. Taylor | 1.40 | 26 |
| Feb. 8 | .....do | 1.55 | 30 |
| Mar. 4 | .....do | 1.55 | 31 |
| Apr. 3 | J. S. Evans | 1.65 | 42 |
| 18 | .....do | 1.57 | 33 |
| May 5 | .....do | 2.30 | 94 |
| June 21 | .....do | 3.80 | 391 |
| July 10 | .....do | 3.60 | 338 |
| 27 | .....do | 2.75 | 178 |
| Aug. 10 | .....do | 2.50 | 124 |
| Sept. 7 | .....do | 2.00 | 58 |
| 22 | .....do | 1.80 | 46 |
| Oct. 25 | F. R. S. Buttemer | 1.35 | 21 |
| Nov. 23 | .....do | 1.52 | 24 |
| Dec. 11 | .....do | 1.67 | 23 |
| 21 | .....do | 1.21 | 12.4 |
| 1906. | | | |
| Jan. 1[a] | F. R. S. Buttemer | 1.95 | 20 |
| 16 | .....do | 1.76 | 32 |
| 24 | .....do | 1.83 | 38 |
| Aug. 24 | Shuey and Hawley | 3.10 | 241 |
| Nov. 5 | G. R. Shuey | 1.71 | 35 |
| Dec. 3 | .....do | 1.90 | 52 |

[a] Channel obstructed by rocks at time of measurement.

*Daily gage height, in feet, of George Collins's canal near Bishop, Cal., for 1904*—Continued.

| Day. (1904) | [illegible] | Day. (1904–5) | Oct. | May. | June. | July. | Aug. | S[illegible] |
|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | 16 | 1.0 | 1.0 | 1.4 | 1.2 | | |
| [illegible] | [illegible] | 17 | .9 | 1.0 | 1.4 | 1.2 | 0.9 | |
| [illegible] | [illegible] | 18 | .8 | 1.0 | 1.5 | | .9 | 1 |
| [illegible] | [illegible] | 19 | | 1.0 | 1.4 | | | |
| [illegible] | [illegible] | 20 | | 1.0 | | 1.0 | | 1 |
| [illegible] | [illegible] | 21 | | | 1.0 | | .9 | 1 |
| [illegible] | [illegible] | 22 | | 1.0 | 1.0 | 1.0 | | |
| [illegible] | [illegible] | 23 | | | | | .8 | 1 |
| [illegible] | [illegible] | 24 | | 1.0 | .9 | | .8 | 1. |
| [illegible] | [illegible] | 25 | | | .9 | | | |
| [illegible] | [illegible] | 26 | | | 1.0 | .9 | | 1 |
| [illegible] | [illegible] | 27 | | .6 | | | .9 | |
| [illegible] | [illegible] | 28 | | .5 | | | | 1.0 |
| [illegible] | [illegible] | 29 | | .5 | .6 | .9 | .9 | |
| [illegible] | [illegible] | 30 | | .6 | .6 | | .9 | |
| [illegible] | [illegible] | 31 | | | | | | |

Note.—[illegible] Jan. 2, 1903, to Feb. 10, 1904; Mar. 7–16, 21–22, 1904; Oct. 17 to Dec. 3[illegible] [illegible] no record for other days for which gage heights are not given.

*Rating table for George Collins's canal near Bishop, Cal.*

**January 1 to June 30, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| [illegible] | [illegible] | [illegible] | [illegible] | 1.10 | 9 | 1.40 | 13 |
| [illegible] | [illegible] | [illegible] | [illegible] | 1.20 | 10 | 1.50 | 13 |
| [illegible] | [illegible] | [illegible] | [illegible] | 1.30 | 11 | 1.60 | 15 |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |

**July 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | 1.10 | 3 | 1.30 | 6 | 1.50 | 9 |
| [illegible] | [illegible] | 1.20 | 4 | 1.40 | 7 | 1.60 | 11 |
| [illegible] | 2 | | | | | | |

*Monthly discharge of George Collins's canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| February | 4 | 0 | 1.1 | 63 |
| March | 12 | 0 | 2.7 | 166 |
| April | 11 | 4 | 7.9 | 470 |
| May | 15 | 4 | 10.5 | 646 |
| June | 15 | 12 | 13.7 | 815 |
| July | 10 | 0 | 6 | 369 |
| August | 11 | 6 | 9 | 553 |
| [illegible] | 13 | 0 | 6 | 357 |
| [illegible] | 11 | 0 | 3 | 119 |
| [illegible] | | | | 3,558 |

[illegible]ted on days for which there is no record.

[illegible]

*Daily gage height, in feet, of Bishop Creek near Bishop, Cal., for 1903–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1906-7.** | | | | | | | | | | | | |
| 26 | 1.7 | 1.7 | 1.95 | 1.95 | 1.95 | 2.0 | 2.05 | | | | | 1.9 |
| 27 | 1.7 | 1.65 | 2.0 | 2.0 | 1.9 | 2.0 | 2.5 | | | | | 1.85 |
| 28 | 1.65 | 1.6 | 2.0 | 1.95 | 2.0 | 2.0 | | | | | | 1.8 |
| 29 | 1.6 | 1.6 | 1.95 | 1.95 | | 1.95 | 2.55 | | | | | 1.85 |
| 30 | 1.55 | 1.6 | 1.95 | 1.95 | | 2.0 | | | | | | 1.8 |
| 31 | 1.55 | | 2.0 | 1.95 | | 2.0 | | | | | | |
| **1907-8.** | | | | | | | | | | | | |
| 1 | 1.85 | 1.6 | 1.75 | 2.1 | 2.0 | 1.95 | 2.0 | 2.2 | 2.3 | 2.8 | 2.7 | 2.25 |
| 2 | 2.0 | 1.6 | 1.7 | 2.15 | 1.95 | 1.95 | 2.0 | 2.4 | 2.25 | 2.5 | 3.5 | 2.2 |
| 3 | 1.95 | 1.6 | 1.7 | 2.3 | 2.0 | 1.85 | 1.95 | 2.5 | 2.15 | 2.55 | 3.6 | 2.0 |
| 4 | 1.6 | 1.9 | 1.6 | 2.1 | 2.0 | 2.1 | 1.9 | 2.3 | 1.9 | 2.6 | 3.7 | 2.15 |
| 5 | 2.0 | 1.6 | 1.75 | 1.95 | 1.9 | 1.9 | 1.95 | 2.4 | 1.9 | 2.8 | 3.7 | 2.1 |
| 6 | 2.0 | 1.6 | 1.7 | 1.95 | 1.9 | 1.95 | 2.1 | 2.3 | 1.95 | 2.8 | 3.5 | 2.1 |
| 7 | 2.0 | 1.6 | 1.75 | 1.65 | 1.9 | 2.2 | 2.0 | 2.2 | 2.1 | 3.1 | 2.9 | 2.1 |
| 8 | 2.0 | 1.6 | 1.75 | 1.6 | 1.6 | 2.4 | 1.9 | 2.3 | 2.0 | 3.1 | 2.9 | 2.3 |
| 9 | 2.0 | 1.6 | 1.75 | 1.9 | 2.0 | 2.3 | 1.9 | 2.35 | 2.1 | 3.1 | 2.9 | 2.3 |
| 10 | 1.9 | 1.6 | 1.6 | 1.7 | 1.9 | 2.1 | 2.0 | 2.1 | 2.1 | 2.85 | 3.1 | 2.2 |
| 11 | 1.6 | 1.6 | 1.7 | 1.95 | 1.9 | 2.0 | 1.95 | 2.0 | 2.2 | 2.9 | 2.6 | 2.3 |
| 12 | 1.6 | 1.6 | 1.75 | 1.9 | 1.85 | 2.3 | 1.9 | 2.0 | 2.2 | 3.0 | 2.6 | 2.1 |
| 13 | 1.6 | 1.6 | 1.75 | 1.95 | 1.6 | 2.1 | 1.95 | 2.0 | 2.4 | 3.1 | 2.2 | 2.2 |
| 14 | 1.6 | 1.6 | 1.7 | 1.85 | 1.9 | 2.0 | 1.9 | 2.1 | 2.4 | 3.1 | 2.1 | 1.9 |
| 15 | 1.6 | 1.6 | 1.7 | 2.0 | 2.3 | 2.0 | 1.95 | 2.0 | 2.4 | 2.95 | 2.2 | 2.3 |
| 16 | 1.9 | 1.8 | 1.7 | 1.7 | 1.85 | 2.0 | 1.9 | 1.9 | 2.2 | 2.3 | 2.3 | 2.0 |
| 17 | 2.0 | 1.9 | 1.6 | 1.85 | 1.6 | 2.0 | 2.0 | 1.9 | 2.3 | 2.4 | 2.2 | 2.1 |
| 18 | 2.0 | 1.9 | 2.0 | 1.85 | 1.85 | 1.9 | 1.85 | 2.1 | 2.15 | 2.3 | 2.3 | 2.15 |
| 19 | 1.9 | 1.85 | 1.8 | 1.85 | 2.0 | 1.85 | 1.95 | 2.0 | 2.25 | 2.5 | 2.3 | 2.2 |
| 20 | 1.9 | 1.6 | 1.75 | 1.85 | 2.0 | 1.95 | 2.1 | 2.0 | 2.2 | 2.5 | 2.1 | 2.1 |
| 21 | 2.0 | 1.9 | 1.9 | 1.75 | 2.1 | 1.9 | 2.1 | 2.1 | 2.25 | 2.5 | 2.1 | 2.1 |
| 22 | 2.0 | 1.8 | 1.95 | 1.9 | 2.0 | 2.0 | 2.0 | 2.15 | 2.3 | 2.5 | 2.2 | 1.95 |
| 23 | 2.1 | 1.8 | 1.85 | 1.8 | 2.0 | 1.95 | 2.0 | 1.9 | 2.5 | 2.6 | 2.2 | 2.15 |
| 24 | 1.9 | 1.8 | 1.85 | 1.85 | 1.9 | 1.95 | 1.9 | 2.1 | 2.4 | 2.7 | 2.3 | 2.25 |
| 25 | 1.9 | 1.85 | 1.9 | 2.0 | 2.2 | 2.0 | 1.95 | 2.0 | 2.6 | 2.6 | 2.0 | 2.2 |
| 26 | 1.8 | 1.8 | 1.75 | 1.85 | 1.95 | 2.0 | 1.65 | 2.1 | 2.5 | 2.5 | 2.3 | 2.0 |
| 27 | 2.1 | 1.8 | 1.6 | 1.9 | 1.65 | 2.1 | 1.9 | 2.15 | 2.8 | 2.5 | 2.2 | 2.0 |
| 28 | 2.0 | 1.6 | 1.55 | 2.15 | 1.9 | 1.9 | 1.85 | 2.1 | 2.7 | 2.8 | 2.2 | 2.0 |
| 29 | 1.9 | 1.8 | 1.95 | 1.95 | 1.8 | 1.9 | 2.1 | 2.3 | 2.7 | 2.7 | 2.0 | 2.0 |
| 30 | 1.8 | 1.65 | 1.85 | 2.0 | | 1.9 | 2.2 | 2.3 | 2.7 | 2.6 | 2.1 | 1.9 |
| 31 | 1.8 | | 2.3 | 2.3 | | 2.0 | | 2.2 | | 2.7 | 2.1 | |
| **1908-9.** | | | | | | | | | | | | |
| 1 | 2.05 | 1.95 | 1.8 | 1.9 | 1.85 | 1.85 | 1.85 | 2.2 | 3.0 | 3.7 | 2.5 | 2.4 |
| 2 | 2.0 | 1.95 | 1.85 | 1.85 | 1.9 | 1.8 | 1.85 | 2.25 | 3.3 | 4.0 | 2.45 | 2.45 |
| 3 | 2.05 | 1.95 | 1.8 | 1.8 | 1.9 | 1.8 | 1.9 | 2.2 | 3.6 | 4.3 | 2.55 | 2.3 |
| 4 | 2.0 | 1.85 | 1.75 | 1.75 | 1.85 | 1.8 | 1.9 | 2.35 | 3.7 | 4.2 | 2.4 | 2.25 |
| 5 | 2.05 | 1.95 | 1.8 | 1.85 | 1.8 | 1.8 | 1.9 | 2.4 | 3.75 | 3.8 | 2.4 | 2.15 |
| 6 | 2.0 | 2.0 | 1.7 | 1.8 | 1.9 | 1.65 | 1.8 | 2.4 | 3.7 | 3.8 | 2.4 | 2.15 |
| 7 | 2.1 | 1.95 | 1.9 | 1.6 | 1.65 | 1.8 | 1.8 | 2.45 | 3.5 | 3.3 | 2.4 | 2.1 |
| 8 | 1.95 | 1.9 | 1.85 | 1.8 | 1.9 | 1.85 | 1.85 | 2.6 | 3.4 | 3.2 | 2.2 | 2.0 |
| 9 | 2.1 | 1.9 | 1.8 | 1.9 | 1.8 | 1.95 | 1.9 | 2.45 | 3.3 | 3.0 | 2.2 | 2.1 |
| 10 | 1.95 | 2.0 | 1.8 | 1.9 | 1.9 | 1.90 | 1.8 | 2.5 | 3.0 | 2.9 | 2.1 | 2.1 |
| 11 | 1.8 | 1.95 | 1.8 | 1.85 | 1.9 | 1.8 | 1.8 | 2.4 | 3.1 | 2.8 | 2.0 | 1.95 |
| 12 | 1.9 | 1.95 | 1.8 | 1.8 | 1.9 | 1.65 | 1.85 | 2.2 | 3.1 | 3.0 | 2.1 | 1.8 |
| 13 | 1.9 | 1.9 | 1.7 | 1.85 | 1.9 | 1.8 | 1.85 | 2.2 | 3.4 | 3.1 | 2.0 | 1.75 |
| 14 | 2.0 | 1.95 | 1.85 | 1.9 | 1.9 | 1.8 | 1.9 | 2.2 | 3.4 | 3.3 | 2.0 | 1.8 |
| 15 | 2.0 | 1.85 | 1.75 | 2.1 | 1.9 | 1.85 | 1.95 | 2.2 | 3.75 | 3.2 | 2.0 | 1.8 |
| 16 | 1.9 | 1.9 | 1.7 | 2.0 | 1.65 | 1.9 | 2.0 | 2.25 | 3.9 | 3.2 | 2.1 | 1.8 |
| 17 | 2.0 | 1.9 | 1.8 | 1.9 | 1.8 | 1.95 | 2.1 | 2.3 | 3.8 | 3.2 | 2.0 | 1.8 |
| 18 | 2.0 | 1.95 | 1.85 | 1.9 | 1.9 | 1.8 | 2.1 | 2.3 | 3.65 | 3.1 | 1.95 | 1.9 |
| 19 | 1.95 | 1.9 | 1.8 | 1.9 | 1.95 | 1.95 | 2.0 | 2.3 | 3.35 | 2.9 | 2.0 | 1.85 |
| 20 | 2.0 | 1.95 | 1.8 | 1.85 | 1.9 | 1.8 | 2.0 | 2.35 | 3.75 | 2.8 | 1.95 | 1.9 |
| 21 | 1.9 | 1.8 | 1.8 | 1.95 | 1.85 | 1.9 | 2.0 | 2.7 | 3.75 | 2.8 | 1.95 | 1.75 |
| 22 | 1.9 | 1.8 | 1.8 | 1.9 | 1.85 | 1.95 | 1.95 | 2.45 | 3.9 | 2.8 | 2.4 | 1.8 |
| 23 | 2.0 | 2.2 | 1.75 | 1.85 | 1.8 | 1.95 | 2.0 | 2.55 | 4.2 | 2.9 | 2.6 | 1.8 |
| 24 | 1.95 | 1.95 | 1.85 | 1.85 | 1.8 | 1.9 | 2.1 | 2.65 | 4.3 | 3.0 | 2.5 | 1.9 |
| 25 | 1.9 | 1.9 | 1.7 | 1.8 | 1.8 | 1.9 | 2.0 | 2.65 | 4.2 | 3.0 | 2.55 | 1.8 |
| 26 | 2.0 | 1.8 | 1.8 | 1.9 | 1.9 | 1.8 | 2.05 | 2.8 | 4.4 | 3.0 | 2.35 | 1.8 |
| 27 | 2.0 | 1.8 | 1.9 | 1.85 | 1.8 | 1.85 | 2.2 | 2.75 | 3.7 | 2.8 | 2.3 | 1.7 |
| 28 | 1.95 | 1.7 | 1.95 | 1.9 | 1.85 | 1.8 | 2.3 | 2.75 | 3.7 | 2.7 | 2.3 | 1.8 |
| 29 | 2.0 | 1.8 | 1.85 | 1.85 | | 1.95 | 2.2 | 2.7 | 3.9 | 2.6 | 2.25 | 1.8 |
| 30 | 1.95 | 1.8 | 1.9 | 1.8 | | 1.95 | 2.2 | 2.7 | 3.8 | 2.6 | 2.4 | 1.75 |
| 31 | 2.0 | | 1.7 | 1.8 | | 1.9 | | 2.8 | | 2.5 | 2.35 | |

*Daily gage height, in feet, of Bishop Creek near Bishop, Cal., for 1903–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1. | 1.8 | 1.8 | 2.0 | 2.1 | 1.9 | 2.25 | 1.9 | 2.4 | 2.75 | 2.4 | 2.1 | [illegible] |
| 2. | 1.8 | 1.8 | 1.9 | 2.05 | 1.85 | 2.1 | 2.0 | 2.3 | 2.65 | 2.4 | 2.0 | 1.4 |
| 3. | 1.85 | 1.9 | 1.95 | 2.1 | 1.9 | 2.3 | 1.8 | 2.2 | 2.65 | 2.6 | 2.0 | [illegible] |
| 4. | 1.85 | 1.85 | 1.9 | 2.1 | 2.0 | 2.3 | 1.85 | 2.0 | 2.4 | 2.65 | 2.0 | [illegible] |
| 5. | 1.7 | 1.85 | 1.9 | 2.2 | 2.0 | 2.2 | 1.6 | 1.8 | 2.5 | 2.35 | 2.0 | 1.7 |
| 6. | 1.85 | 1.8 | 1.95 | 2.15 | 1.9 | 2.3 | 1.85 | 2.1 | 2.5 | 2.1 | 2.1 | [illegible] |
| 7. | 1.8 | 1.8 | 2.0 | 2.05 | 1.95 | 2.3 | 1.75 | 2.15 | 2.5 | 2.2 | 2.0 | [illegible] |
| 8. | 1.9 | 1.8 | 1.9 | 2.1 | 1.75 | 2.3 | 1.85 | 2.1 | 2.2 | 2.2 | 1.9 | [illegible] |
| 9. | 1.8 | 2.0 | 2.0 | 2.0 | 1.95 | 2.3 | 1.8 | 2.3 | 2.55 | 2.25 | 1.7 | [illegible] |
| 10. | 1.85 | 1.8 | 1.95 | 2.1 | 1.9 | 2.2 | 1.95 | 2.5 | 2.5 | 2.25 | 1.9 | [illegible] |
| 11. | 1.8 | 1.85 | 2.0 | 2.0 | 1.85 | 2.5 | 1.9 | 2.3 | 2.2 | 2.3 | 2.25 | 1.7 |
| 12. | 1.85 | 1.85 | 1.85 | 2.0 | 1.85 | 2.25 | 1.75 | 2.55 | 2.4 | 2.2 | 2.1 | 1.4 |
| 13. | 1.75 | 1.85 | 2.0 | 3.0 | 1.9 | 2.4 | 1.55 | 2.0 | 2.2 | 2.2 | 2.0 | 1.75 |
| 14. | 1.8 | 1.85 | 2.1 | 2.05 | 1.8 | 2.3 | 1.85 | 2.3 | 2.0 | 2.05 | 2.15 | 1.7 |
| 15. | 1.8 | 1.9 | 2.0 | 1.95 | 2.0 | 2.5 | 1.8 | 3.5 | 2.3 | 2.15 | 2.0 | 1.7 |
| 16. | 1.8 | 1.8 | 2.1 | 1.9 | 1.85 | 2.4 | 1.8 | 3.2 | 1.8 | 2.0 | 1.9 | 1.7 |
| 17. | 1.85 | 1.9 | 2.1 | 1.9 | 1.9 | 2.5 | 1.85 | 2.9 | 2.1 | 2.1 | 1.85 | 1.2 |
| 18. | 1.8 | 1.85 | 2.1 | 1.9 | 1.85 | 2.4 | 2.15 | 3.25 | 2.1 | 2.0 | 1.95 | [illegible] |
| 19. | 1.75 | 2.0 | 2.0 | 1.95 | 2.0 | 2.5 | 1.95 | 3.5 | 1.95 | 2.2 | 1.95 | 1.7 |
| 20. | 1.85 | 1.85 | 2.1 | 2.0 | 1.9 | 2.4 | 2.05 | 3.3 | 2.1 | 2.2 | 2.0 | 1.7 |
| 21. | 1.75 | 2.0 | 2.0 | 1.9 | 2.0 | 2.4 | 2.1 | 2.6 | 2.25 | 2.7 | 2.0 | 1.4 |
| 22. | 1.8 | 1.85 | 2.2 | 2.0 | 1.9 | 2.3 | 2.35 | 3.25 | 1.85 | 4.0 | 2.0 | 1.75 |
| 23. | 1.75 | 1.95 | 2.0 | 1.9 | 2.1 | 2.4 | 2.5 | 3.2 | 2.0 | 3.9 | 2.0 | [illegible] |
| 24. | 1.8 | 1.85 | 2.15 | 1.9 | 1.9 | 2.3 | 2.25 | 3.0 | 2.1 | 2.2 | 3.9 | [illegible] |
| 25. | 1.75 | 2.0 | 2.0 | 1.9 | 2.0 | 2.35 | 1.95 | 3.1 | 2.2 | 2.1 | 2.3 | 1.6 |
| 26. | 1.8 | 1.85 | 2.1 | 1.9 | 2.1 | 2.3 | 2.55 | 2.5 | 2.2 | 1.95 | 2.2 | 1.4 |
| 27. | 1.75 | 1.9 | 2.0 | 1.9 | 2.1 | 2.3 | 2.5 | 2.4 | 2.45 | 1.8 | 1.8 | 1.65 |
| 28. | 1.85 | 1.9 | 2.1 | 1.9 | 2.0 | 2.1 | 2.35 | 2.7 | 2.4 | 2.2 | 2.0 | 1.4 |
| 29. | 1.75 | 1.9 | 2.0 | 1.9 | ...... | 2.0 | 1.8 | 2.6 | 2.5 | 2.1 | 2.0 | 1.75 |
| 30. | 1.85 | 1.95 | 2.1 | 1.9 | ...... | 1.9 | 2.25 | 2.8 | 2.4 | 1.9 | 1.95 | 1.75 |
| 31. | 1.85 | ...... | 2.1 | 1.9 | ...... | 2.0 | ...... | 2.6 | ...... | 1.8 | 2.1 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1. | 1.55 | 1.7 | 1.75 | 1.65 | 1.8 | 16. | 1.75 | 1.65 | 1.8 | 1.9 | 2.0 |
| 2. | 1.35 | 1.6 | 1.8 | 1.85 | 1.95 | 17. | 1.55 | 1.75 | 1.6 | 1.85 | [illegible] |
| 3. | 1.4 | 1.8 | 1.8 | 1.55 | 1.95 | 18. | 1.7 | 1.6 | 1.85 | 1.85 | 2.4 |
| 4. | 1.8 | 1.7 | 1.45 | 1.9 | 2.0 | 19. | 1.65 | 1.8 | 1.6 | 1.85 | [illegible] |
| 5. | 1.45 | 1.7 | 1.8 | 1.6 | 1.8 | 20. | 1.7 | 1.6 | 1.9 | 1.85 | 2.75 |
| 6. | 1.85 | 1.4 | 1.8 | 1.85 | 1.8 | 21. | 1.75 | 1.8 | 1.8 | 1.7 | [illegible] |
| 7. | 1.7 | 1.7 | 1.8 | 1.65 | 1.85 | 22. | 1.85 | 1.6 | 1.9 | 1.8 | 2.5 |
| 8. | 1.75 | 1.55 | 1.8 | 1.75 | 1.8 | 23. | 1.65 | 1.8 | 1.85 | 1.85 | 2.4 |
| 9. | 1.8 | 1.75 | 1.75 | 1.55 | 1.9 | 24. | 1.7 | 1.5 | 1.5 | 1.95 | 2.1 |
| 10. | 1.8 | 1.6 | 1.45 | 1.85 | 2.1 | 25. | 1.65 | 1.8 | 1.6 | 1.5 | [illegible] |
| 11. | 1.7 | 1.95 | 1.8 | 1.15 | 1.9 | 26. | 1.7 | 1.65 | 1.75 | 1.9 | 1.8 |
| 12. | 1.7 | 1.8 | 1.6 | 1.85 | 1.85 | 27. | 1.75 | 1.8 | 1.3 | 1.85 | [illegible] |
| 13. | 1.35 | 1.75 | 1.75 | 2.0 | 1.8 | 28. | 1.85 | 1.75 | 1.8 | 1.96 | [illegible] |
| 14. | 1.6 | 1.8 | 1.8 | 1.85 | 1.75 | 29. | 1.7 | 1.8 | 1.75 | 2.2 | ...... |
| 15. | 1.65 | 1.75 | 1.85 | 1.65 | 1.9 | 30. | 1.7 | 1.55 | 1.8 | 1.9 | ...... |
| | | | | | | 31. | 1.65 | ...... | 1.6 | 1.96 | ...... |

NOTE.—Gage heights interpolated Feb. 17-19, 1905. No record July 7-14, 1906. No gage heights recorded May 1 to Sept. 5, 1907. Record of daily discharge obtained from a weir. Gage heights Aug. 15-30, 1909, read on a temporary gage at approximately the same datum.

*Rating tables for Bishop Creek near Bishop, Cal.*

**January 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.30 | 22 | 2.10 | 80 | 2.90 | 183 | 3.70 | 355 |
| 1.40 | 27 | 2.20 | 90 | 3.00 | 300 | 3.80 | 386 |
| 1.50 | 32 | 2.30 | 101 | 3.10 | 218 | 3.90 | 417 |
| 1.60 | 39 | 2.40 | 113 | 3.20 | 237 | 4.00 | 448 |
| 1.70 | 46 | 2.50 | 125 | 3.30 | 257 | 4.10 | 479 |
| 1.80 | 54 | 2.60 | 138 | 3.40 | 279 | 4.20 | 510 |
| 1.90 | 62 | 2.70 | 152 | 3.50 | 302 | | |
| 2.00 | 71 | 2.80 | 167 | 3.60 | 327 | | |

**January 1 to December 11, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.40 | 21 | 2.10 | 74 | 2.80 | 170 | 3.50 | 314 |
| 1.50 | 27 | 2.20 | 84 | 2.90 | 188 | 3.60 | 339 |
| 1.60 | 33 | 2.30 | 95 | 3.00 | 306 | 3.70 | 365 |
| 1.70 | 40 | 2.40 | 108 | 3.10 | 225 | 3.80 | 391 |
| 1.80 | 48 | 2.50 | 122 | 3.20 | 245 | | |
| 1.90 | 56 | 2.60 | 137 | 3.30 | 267 | | |
| 2.00 | 65 | 2.70 | 153 | 3.40 | 290 | | |

NOTE.—Table is based on 14 discharge measurements made during 1905 and some older measurements. It is not very well defined. Not applicable after Dec. 11, as conditions were changed at the station.

**January 1 to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.40 | 7 | 2.40 | 114 | 3.40 | 303 | 4.40 | 534 |
| 1.50 | 10 | 2.50 | 130 | 3.50 | 325 | 4.50 | 558 |
| 1.60 | 14 | 2.60 | 147 | 3.60 | 347 | 4.60 | 582 |
| 1.70 | 24 | 2.70 | 164 | 3.70 | 370 | 4.70 | 606 |
| 1.80 | 35 | 2.80 | 182 | 3.80 | 393 | 4.80 | 630 |
| 1.90 | 46 | 2.90 | 201 | 3.90 | 416 | 4.90 | 654 |
| 2.00 | 58 | 3.00 | 220 | 4.00 | 439 | 5.00 | 678 |
| 2.10 | 70 | 3.10 | 240 | 4.10 | 462 | 5.20 | 726 |
| 2.20 | 84 | 3.20 | 261 | 4.20 | 486 | 5.40 | 774 |
| 2.30 | 98 | 3.30 | 282 | 4.30 | 510 | 5.60 | 822 |

NOTE.—Table is based on 6 discharge measurements made during 1906, and is not well defined.

**May 1 to August 31, 1907.**

Discharge determined from weirs.

**January 1 to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.60 | 40 | 2.20 | 81 | 2.80 | 163 | 3.40 | 288 |
| 1.70 | 44 | 2.30 | 92 | 2.90 | 180 | 3.50 | 314 |
| 1.80 | 49 | 2.40 | 104 | 3.00 | 198 | 3.70 | 370 |
| 1.90 | 55 | 2.50 | 117 | 3.10 | 218 | 3.80 | 400 |
| 2.00 | 62 | 2.00 | 131 | 3.20 | 240 | | |
| 2.10 | 71 | 2.70 | 146 | 3.30 | 263 | | |

NOTE.—Table applicable only to open channel. It is based on 12 discharge measurements made during 1908. It is fairly well defined between gage heights 1.9 feet and 3.5 feet.

[illegible] —311 [illegible]

[illegible]

*Daily discharge, in second-feet, of Bishop Creek near Bishop, Cal., for 1909–1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 39 | 52 | 57 | 48 | 62 | 16 | 57 | 48 | 62 | 73 | 85 |
| 2 | 25 | 43 | 62 | 68 | 79 | 17 | 39 | 57 | 43 | 68 | 110 |
| 3 | 28 | 62 | 62 | 39 | 79 | 18 | 52 | 43 | 68 | 68 | 138 |
| 4 | 62 | 52 | 32 | 73 | 85 | 19 | 48 | 62 | 43 | 68 | 154 |
| 5 | 32 | 52 | 62 | 43 | 62 | 20 | 52 | 43 | 73 | 68 | 131 |
| 6 | 68 | 28 | 62 | 68 | 62 | 21 | 57 | 62 | 62 | 52 | 154 |
| 7 | 52 | 52 | 62 | 48 | 68 | 22 | 68 | 43 | 73 | 62 | 154 |
| 8 | 57 | 39 | 62 | 57 | 62 | 23 | 48 | 62 | 68 | 68 | 138 |
| 9 | 62 | 57 | 57 | 39 | 73 | 24 | 52 | 35 | 35 | 79 | 110 |
| 10 | 62 | 43 | 32 | 68 | 97 | 25 | 48 | 62 | 43 | 35 | 73 |
| 11 | 52 | 79 | 62 | 15 | 73 | 26 | 52 | 48 | 57 | 73 | 62 |
| 12 | 52 | 62 | 43 | 68 | 68 | 27 | 57 | 62 | 22 | 68 | 73 |
| 13 | 25 | 57 | 57 | 85 | 62 | 28 | 68 | 57 | 62 | 79 | 62 |
| 14 | 43 | 62 | 62 | 68 | 57 | 29 | 52 | 62 | 57 | 110 | ....... |
| 15 | 48 | 57 | 68 | 48 | 73 | 30 | 52 | 39 | 62 | 73 | ....... |
| | | | | | | 31 | 48 | ....... | 43 | 79 | ....... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to 24, 1909, fairly well defined below 200 second-feet. June 25 to Aug. 15, 1909, not well defined. Aug. 31 to Dec. 31, 1909, not well defined. Jan. 1, 1910, to Feb. 28, 1911, fairly well defined between 40 and 170 second-feet, not well defined above 200 second-feet. Aug. 15 to 30, 1909, estimated from gage height obtained from temporary gage.

*Monthly discharge of Bishop Creek near Bishop, Cal., for 1903–1911.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1903.** | | | | | |
| August 11–31 | 125 | 71 | 95.8 | 3,990 | |
| September | 71 | 39 | 50.5 | 3,005 | |
| **1903–4.** | | | | | |
| October | 46 | 30 | 38.6 | 2,373 | |
| November | 30 | 27 | 28.6 | 1,702 | |
| December | 30 | 22 | 27.3 | 1,679 | |
| January | 27 | 27 | 27.0 | 1,660 | |
| February | 39 | 27 | 31.8 | 1,829 | |
| March | 62 | 32 | 42.0 | 2,582 | |
| April | 113 | 32 | 56.6 | 3,366 | |
| May | 237 | 71 | 149.3 | 9,180 | |
| June | 479 | 237 | 372.8 | 22,183 | |
| July | 355 | 167 | 233 | 14,327 | |
| August | 386 | 80 | 212 | 13,035 | |
| September | 80 | 54 | 64 | 3,808 | |
| The year | 479 | 22 | 107 | 77,700 | |
| **1904–5.** | | | | | |
| October | 113 | 58 | 78 | 4,796 | |
| November | 62 | 32 | 41 | 2,440 | |
| December | 32 | 24 | 29 | 1,783 | |
| January | 27 | 21 | 22.5 | 1,384 | |
| February | 30 | 21 | 25.2 | 1,400 | |
| March | 48 | 27 | 38.2 | 2,349 | |
| April | 122 | 40 | 56.6 | 3,368 | |
| May | 170 | 65 | 113 | 6,948 | |
| June | 391 | 188 | 299 | 17,790 | |
| July | 365 | 122 | 215 | 13,220 | |
| August | 137 | 65 | 92.1 | 5,663 | |
| September | 74 | 40 | 53.6 | 3,189 | |
| The year | 365 | 21 | 88.6 | 64,300 | |
| **1905–6.** | | | | | |
| October | 56 | 21 | 36.1 | 2,220 | |
| November | 33 | 21 | 25.6 | 1,523 | |
| December | 27 | 21 | 24.3 | 530 | |
| January | 98 | 10 | 33.4 | 2,050 | |
| February | 40 | 12 | 16.4 | 911 | |
| March | 84 | 10 | 42.0 | 2,580 | |
| April | 138 | 14 | 52.8 | 3,140 | |
| May | 220 | 114 | 172 | 10,600 | |
| June | 666 | 114 | 382 | 22,700 | |

*Monthly discharge of Bishop Creek near Bishop, Cal., for 1903–1911*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1905–6.** | | | | | |
| July | 822 | 510 | [a] 706 | 43,400 | |
| August | 439 | 182 | 350 | 21,500 | |
| September | 182 | 84 | 124 | 7,380 | |
| The year | 822 | 10 | 164 | 119,000 | |
| **1906–7.** | | | | | |
| October | 84 | 12 | 45.3 | 2,780 | |
| November | 40 | 6 | 17.5 | 1,040 | |
| December | 58 | 35 | 50.0 | 3,070 | |
| January | 76 | 48 | 56.4 | 3,470 | C. |
| February | 58 | 49 | 54.0 | 3,000 | C. |
| March | 66 | 49 | 55.4 | 3,410 | C. |
| April | 148 | 58 | 75.8 | 4,510 | C. |
| May | 195 | 101 | 131 | 8,060 | B. |
| June | 442 | 226 | 297 | 17,700 | D. |
| July | 418 | 302 | 354 | 21,800 | D. |
| August | 300 | 190 | 231 | 14,200 | B. |
| September | 160 | 41 | 83.7 | 4,980 | B. |
| The year | 442 | 6 | 121 | 88,000 | |
| **1907–8.** | | | | | |
| October | 58 | 41 | 66.0 | 4,060 | B. |
| November | 42 | 38 | 49.4 | 2,940 | B. |
| December | 88 | 38 | 52.5 | 3,230 | B. |
| January | 92 | 44 | 58.8 | 3,620 | B. |
| February | 92 | 49 | 58.6 | 3,370 | B. |
| March | 104 | 52 | 64.3 | 3,950 | B. |
| April | 71 | 52 | 59.7 | 3,550 | B. |
| May | 117 | 55 | 76.6 | 4,710 | B. |
| June | 163 | 55 | 94.5 | 5,620 | B. |
| July | 218 | 92 | 150 | 9,220 | B. |
| August | 370 | 62 | 143 | 8,790 | B. |
| September | 92 | 55 | 73.7 | 4,390 | B. |
| The year | 370 | 38 | 78.9 | 57,400 | |
| **1908–9.** | | | | | |
| October | 71 | 49 | 60.4 | 3,710 | B. |
| November | 81 | 44 | 55.7 | 3,310 | B. |
| December | 58 | 44 | 49.4 | 3,040 | B. |
| January | 74 | 36 | 47.5 | 2,920 | A. |
| February | 56 | 40 | 47.2 | 2,620 | A. |
| March | 56 | 40 | 46.6 | 2,870 | A. |
| April | 100 | 40 | 59.3 | 3,530 | A. |
| May | 180 | 87 | 124 | 7,620 | A. |
| June | 713 | 218 | 379 | 22,600 | B. |
| July | 683 | 203 | 363 | 22,300 | B. |
| August | 214 | 96 | 134 | 8,240 | C. |
| September | 147 | 51 | 78.0 | 4,640 | B. |
| The year | 713 | 36 | 120 | 87,400 | |
| **1909–10.** | | | | | |
| October | 71 | 51 | 61.4 | 3,780 | B. |
| November | 83 | 61 | 69.2 | 4,120 | B. |
| December | 108 | 71 | 85.5 | 5,260 | B. |
| January | 117 | 73 | 83.9 | 5,160 | B. |
| February | 97 | 57 | 77.5 | 4,300 | B. |
| March | 154 | 73 | 124 | 7,620 | B. |
| April | 162 | 39 | 85.7 | 5,100 | B. |
| May | 359 | 62 | 186 | 11,400 | C. |
| June | 198 | 62 | 125 | 7,440 | B. |
| July | 477 | 62 | 134 | 8,240 | C. |
| August | 453 | 52 | 97.6 | 6,000 | C. |
| September | 85 | 17 | 46.9 | 2,790 | B. |
| The year | 477 | 17 | 98.1 | 71,200 | |
| **1910–11.** | | | | | |
| October | 68 | 25 | 50.2 | 3,090 | B. |
| November | 79 | 28 | 52.7 | 3,140 | B. |
| December | 73 | 22 | 55.3 | 3,400 | B. |
| January | 110 | 15 | 63.2 | 3,890 | |
| February | 154 | 57 | 89.5 | 4,970 | |

[a] Mean for 23 days taken as mean for the month.

[M]onthly estimates for 1907 include diversions above the station. During May–August, 1907, [we]re obtained from a 30-foot weir located about 3 miles above the mouth of the canyon above all

## RAWSON CANAL NEAR BISHOP, CAL.

This station was established August 7, 1903, by R. S. Hawley. It was located at the county bridge, 2½ miles east of Bishop.

The channel is straight for 100 feet above and below the station, and the current is swift. The right bank is high and the left bank is low. Neither bank is liable to overflow. The bed of the stream is composed of gravel and is permanent.

Discharge measurements were made from the bridge.

The gage was a vertical rod fastened to the bridge.

*Discharge measurements of Rawson canal near Bishop, Cal., in 1903-1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| July 31 | R. S. Hawley | ........ | 17.0 | Mar. 14 | R. J. Taylor | 1.75 | 22 |
| Aug. 7 | .....do | 1.70 | 17.6 | Apr. 1 | J. S. Evans | 1.85 | 26 |
| 11 | .....do | 1.62 | 13.6 | 17 | .....do | 1.60 | 16.9 |
| 17 | .....do | 1.85 | 20.3 | May 2 | .....do | 1.90 | 28 |
| 27 | .....do | 1.73 | 17.1 | 25 | .....do | 1.90 | 27 |
| Sept. 7 | .....do | 1.77 | 18.2 | June 28 | .....do | 1.70 | 18.1 |
| 14 | .....do | 1.81 | 17.1 | July 26 | .....do | 1.30 | 2.1 |
| Oct. 24 | .....do | 1.73 | 15.4 | Aug. 9 | .....do | 1.55 | 14.6 |
| Nov. 27 | .....do | 1.60 | 13.0 | Sept. 5 | .....do | 1.45 | 7.0 |
| | | | | 14 | .....do | 1.50 | 10.6 |
| 1904. | | | | Oct. 3 | .....do | 1.90 | 17.8 |
| Feb. 4 | R. S. Hawley | 1.66 | 16.6 | 25 | F. R. S. Buttemer | 1.05 | 1.2 |
| 11 | .....do | 2.01 | 35 | Nov. 23 | .....do | 1.15 | 1.1 |
| Apr. 2 | .....do | 1.50 | 9.4 | Dec. 11 | .....do | 1.08 | 1.3 |
| 14 | .....do | 1.87 | 27 | | | | |
| June 8 | .....do | 1.96 | 24 | | | | |
| July 12 | Clausen and Barnes | 1.75 | 18.8 | | | | |
| Aug. 6 | L. M. Barnes | 1.80 | 21 | | | | |
| 20 | .....do | 2.23 | 31 | | | | |

*Daily gage height, in feet, of Rawson canal near Bishop, Cal., for 1903–1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | | 1.74 | 11 | 1.60 | 1.77 | 21 | 1.84 | 2.10 |
| 2 | | 1.72 | 12 | 1.80 | 1.85 | 22 | 1.82 | 1.94 |
| 3 | | 1.76 | 13 | 1.90 | 1.90 | 23 | 1.81 | 1.92 |
| 4 | | 1.73 | 14 | 1.90 | 1.72 | 24 | 1.80 | 1.93 |
| 5 | | 1.74 | 15 | 1.85 | 1.80 | 25 | 1.75 | 1.94 |
| 6 | | 1.80 | 16 | 1.80 | 1.85 | 26 | 1.74 | 2.04 |
| 7 | | 1.79 | 17 | 1.85 | 1.93 | 27 | 1.74 | 2.00 |
| 8 | | 1.80 | 18 | 1.82 | 1.94 | 28 | 1.76 | 2.00 |
| 9 | | 1.76 | 19 | 1.81 | 1.99 | 29 | 1.73 | 2.01 |
| 10 | | 1.78 | 20 | 1.86 | 2.10 | 30 | 1.74 | 2.00 |
| | | | | | | 31 | 1.72 | ........ |

| Day. | Oct. | Nov. | Dec. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903-4. | | | | | | | | | | | |
| 1 | 2.00 | 1.59 | 1.65 | ........ | 1.7 | 1.5 | 1.9 | 2.1 | 1.9 | 1.8 | 2.25 |
| 2 | 2.00 | 1.63 | 1.64 | ........ | 1.7 | 1.5 | 1.9 | 1.9 | 1.9 | 1.8 | 2.2 |
| 3 | 1.96 | 1.60 | 1.70 | 1.65 | 1.7 | 1.5 | 1.85 | 1.9 | 1.8 | 1.8 | 2.1 |
| 4 | 1.93 | 1.60 | 1.71 | 1.65 | 1.7 | 1.5 | 1.85 | 1.9 | 1.8 | 1.8 | 2.1 |
| 5 | 1.93 | 1.60 | 1.70 | 1.8 | 1.7 | 1.5 | 1.85 | ........ | 1.8 | 1.8 | 2.0 |
| 6 | 1.94 | 1.63 | 1.35 | 1.9 | 1.7 | 1.5 | 1.9 | ........ | 1.8 | 1.8 | 2.1 |
| 7 | 1.91 | 1.63 | 1.35 | 1.9 | 1.7 | 1.5 | 1.9 | ........ | 1.8 | 1.8 | 2.1 |
| 8 | 1.92 | 1.63 | 1.43 | 1.9 | 1.7 | 1.5 | 1.9 | 2.0 | 1.8 | 1.8 | 2.1 |
| 9 | 2.01 | 1.65 | 1.35 | 1.9 | 1.7 | 1.8 | 1.9 | 1.9 | 1.8 | 1.75 | 2.0 |
| 10 | 2.01 | 1.66 | 1.30 | 1.9 | 1.67 | 1.8 | 1.85 | 1.9 | 1.8 | 1.75 | 2.0 |
| 11 | 1.80 | 1.65 | 1.30 | 2.0 | 1.75 | 1.9 | 1.9 | 1.9 | 1.75 | 1.75 | 2.0 |
| 12 | 1.75 | 1.61 | 1.30 | 2.0 | 1.75 | 2.0 | 1.9 | 2.0 | 1.7 | 1.7 | 2.0 |
| 13 | 1.75 | 1.63 | 1.39 | 2.1 | 1.7 | 2.0 | 1.9 | 2.0 | 1.7 | 1.7 | 2.1 |
| 14 | 1.70 | 1.60 | 1.30 | 2.4 | 1.73 | 1.9 | 1.9 | 2.0 | 1.65 | 1.7 | 2.2 |
| 15 | 1.70 | 1.70 | 1.42 | 2.4 | 1.7 | 1.9 | 2.0 | 2.0 | 1.65 | 1.7 | 2.1 |

*Daily gage height, in feet, of Rawson canal near Bishop, Cal., for 1903–1905—*Con.

| Day. | Oct. | Nov. | Dec. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | |
| 16 | 1.70 | 1.80 | 1.44 | 1.85 | 1.7 | 1.9 | 2.0 | 2.0 | 1.8 | 1.75 | 2.1 |
| 17 | 1.65 | 1.92 | 1.45 | 1.8 | 1.7 | 1.65 | 2.0 | 2.0 | 1.8 | 1.7 | 2.1 |
| 18 | 1.65 | 1.92 | 1.1 | 1.75 | 1.7 | 1.65 | 2.0 | 2.0 | 1.9 | 1.65 | 2.2 |
| 19 | 1.80 | 1.93 | 1.1 | 1.75 | 1.7 | 1.65 | 2.0 | 2.0 | 1.9 | 1.9 | 2.2 |
| 20 | 1.75 | 1.90 | 1.1 | 1.7 | 1.75 | 1.85 | 1.95 | 2.0 | 1.9 | 1.9 | 2.3 |
| 21 | 1.70 | 1.90 | 1.1 | 1.7 | 1.7 | 1.9 | 2.0 | 2.0 | 1.95 | 2.2 | 2.3 |
| 22 | 1.65 | 1.90 | 1.2 | 1.8 | 1.65 | 1.9 | 1.9 | 2.0 | 1.95 | 2.2 | 2.3 |
| 23 | 1.70 | 1.91 | 1.1 | 1.75 | 1.65 | 1.9 | 1.9 | 2.0 | 2.2 | 2.25 | 2.3 |
| 24 | 1.73 | 1.90 | 1.1 | 1.75 | 1.7 | 1.9 | 1.9 | 1.9 | 1.4 | 2.25 | 2.3 |
| 25 | 1.75 | 1.90 | 1.1 | 1.7 | 1.7 | 1.9 | 1.9 | 1.9 | 1.4 | 2.3 | 2.3 |
| 26 | 1.76 | 1.90 | 1.3 | 1.75 | 1.55 | 1.85 | 1.9 | 1.9 | ........ | 2.3 | 2.3 |
| 27 | 1.77 | 1.53 | 1.3 | 1.7 | 1.5 | 1.9 | 1.9 | 1.9 | ........ | 2.3 | 2.4 |
| 28 | 1.63 | 1.50 | 1.3 | 1.7 | 1.5 | 1.9 | 1.9 | 1.9 | 1.95 | 2.3 | ........ |
| 29 | 1.59 | 1.51 | 1.3 | 1.7 | 1.55 | 1.9 | 1.9 | 1.9 | 1.95 | 2.3 | ........ |
| 30 | 1.59 | 1.65 | 1.3 | ........ | 1.55 | 1.9 | 1.9 | 1.9 | 1.85 | 2.25 | ........ |
| 31 | 1.59 | ........ | 1.3 | ........ | 1.5 | ........ | 2.0 | ........ | 1.8 | 2.3 | ........ |

| Day. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | | | |
| 1 | ........ | 1.8 | 1.7 | 1.8 | 0.8 | 0.9 | 1.3 | 1.8 |
| 2 | ........ | ........ | 1.7 | 1.8 | .9 | .9 | ........ | 1.8 |
| 3 | ........ | 1.8 | 1.7 | 1.8 | .9 | .8 | 1.3 | 1.8 |
| 4 | ........ | 1.8 | 1.9 | 1.8 | .9 | .8 | 1.5 | 1.8 |
| 5 | ........ | 1.8 | ........ | 1.7 | .9 | .8 | 1.5 | 1.8 |
| 6 | 1.4 | ........ | 1.9 | 1.9 | .8 | .8 | 1.5 | 1.8 |
| 7 | 1.4 | 1.7 | 1.9 | 1.9 | .8 | .8 | 1.7 | 1.6 |
| 8 | 1.5 | 1.7 | 1.8 | 1.9 | .8 | .8 | 1.7 | 1.4 |
| 9 | 1.5 | ........ | 1.8 | 1.8 | .8 | .8 | 1.7 | 1.4 |
| 10 | 1.6 | 1.7 | 1.8 | 1.8 | .8 | .8 | 1.7 | 1.4 |
| 11 | 1.6 | 1.7 | 1.8 | 1.9 | .7 | .8 | 1.7 | 1.4 |
| 12 | 1.6 | 1.7 | 1.8 | 1.8 | .7 | .8 | 1.7 | 1.6 |
| 13 | 1.8 | ........ | 1.8 | 1.8 | .7 | .9 | 1.6 | 1.6 |
| 14 | 1.8 | 1.7 | 1.8 | 1.7 | .8 | .9 | 1.6 | ........ |
| 15 | ........ | 1.6 | 1.9 | 1.0 | .8 | .0 | 1.6 | ........ |
| 16 | ........ | 1.6 | 1.9 | .9 | .8 | ........ | 1.6 | ........ |
| 17 | ........ | 1.6 | 1.9 | 1.4 | .8 | .9 | 1.6 | ........ |
| 18 | ........ | 1.6 | 1.9 | 1.4 | .8 | .9 | 1.6 | ........ |
| 19 | ........ | 1.6 | 1.9 | ........ | .8 | .9 | 1.6 | ........ |
| 20 | ........ | 1.7 | 1.9 | ........ | .8 | ........ | 1.6 | ........ |
| 21 | ........ | 1.7 | 1.8 | ........ | .8 | .7 | 1.7 | ........ |
| 22 | ........ | 1.7 | 1.9 | .6 | .7 | .7 | 1.7 | ........ |
| 23 | ........ | ........ | 1.9 | .8 | .7 | .7 | ........ | ........ |
| 24 | ........ | 1.7 | 1.8 | .9 | .7 | .7 | 1.7 | ........ |
| 25 | ........ | 1.7 | 1.8 | .9 | .7 | .7 | 1.7 | ........ |
| 26 | ........ | 1.7 | 1.8 | .9 | ........ | 1.3 | 1.7 | ........ |
| 27 | ........ | 1.7 | 1.8 | .8 | ........ | 1.3 | 1.7 | ........ |
| 28 | ........ | 1.7 | 1.8 | .8 | ........ | 1.3 | 1.7 | ........ |
| 29 | ........ | 1.7 | 1.7 | .8 | .9 | ........ | 1.7 | ........ |
| 30 | 1.8 | 1.7 | 1.7 | .8 | .9 | 1.3 | ........ | ........ |
| 31 | 1.8 | ........ | 1.7 | ........ | .9 | ........ | ........ | ........ |

NOTE. Canal dry from Jan. 1 to Feb. 2, 1904, June 5–7, 1904, July 26–27, 1904, Sept. 28, 1904, to Mar. 5, 1905, and Oct. 14 to Dec. 31, 1905.

*Rating tables for Rawson canal near Bishop, Cal.*

**January 1 to May 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.30 | 1 | 1.60 | 14 | 1.90 | 29 | 2.20 | 48 |
| 1.40 | 5 | 1.70 | 18 | 2.00 | 35 | 2.30 | 55 |
| 1.50 | 9 | 1.80 | 23 | 2.10 | 41 | | |

**June 1 to September 30, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1.40 | 5 | 1.70 | 16 | 2.00 | 26 | 2.30 | 37 |
| 1.50 | 9 | 1.80 | 19 | 2.10 | 30 | 2.40 | 40 |
| 1.60 | 12 | 1.90 | 23 | 2.20 | 33 | | |

*Monthly discharge of Rawson canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| February | 50 | 0 | 26.2 | 1,403 |
| March | 20 | 9 | 16.6 | 1,018 |
| April | 35 | 9 | 22.1 | 1,319 |
| May | 35 | 26 | 30 | 1,845 |
| June | 27 | 0 | 23.1 | 1,374 |
| July | 25 | 0 | 20 | 1,230 |
| August | 37 | 16 | 26 | 1,599 |
| September | 40 | 0 | 29 | 1,726 |
| The period | | | | 11,514 |

## A. O. COLLINS'S CANAL NEAR BISHOP, CAL.

This station was established August 7, 1903. It was located at the county bridge 3 miles east of Bishop.

The channel is straight for 100 feet above and 50 feet below the station. The current is sluggish. Both banks are high and are not liable to overflow. The bed of the stream is sandy and shifting.

The gage was a vertical rod fastened to the right bank just above the bridge, from which discharge measurements were made.

*Discharge measurements of A. O. Collins's canal near Bishop, Cal., in 1903–1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| July 31 | R. S. Hawley | | 12.1 | Oct. 14 | Clapp, Hawley, and Taylor. | 2.58 | 2.8 |
| Aug. 7 | do | 2.2 | 8.3 | | | | |
| 11 | do | 2.0 | 3.9 | Nov. 1 | R. J. Taylor | 2.50 | 2.1 |
| 17 | do | 1.82 | 2.6 | Dec. 1 | do | 2.48 | 1.8 |
| 27 | do | 2.1 | 8.8 | | | | |
| Sept. 7 | do | 2.1 | 7.9 | 1905. | | | |
| 14 | do | 2.1 | 7.6 | Mar. 14 | R. J. Taylor | 2.90 | 25 |
| Oct. 23 | do | 1.65 | 1.2 | Apr. 1 | J. S. Evans | 2.00 | 2.1 |
| | | | | May 2 | do | 3.00 | 25 |
| 1904. | | | | June 28 | do | 2.75 | 18.4 |
| Feb. 4 | R. S. Hawley | 1.80 | 5.2 | July 26 | do | 2.90 | 18.4 |
| Apr. 14 | do | 1.95 | 7.8 | Aug. 9 | do | 2.65 | 14.0 |
| June 8 | do | 3.67 | 40 | Sept. 5 | do | 2.38 | 7.3 |
| 12 | Clausen and Barnes | 3.80 | 28 | 14 | do | 2.33 | 6.5 |
| Aug. 6 | L. M. Barnes | 3.45 | 19.8 | Oct. 3 | do | 2.80 | •15.3 |
| 20 | do | 3.35 | 14.3 | 25 | F. R. S. Buttemer | | 0 |
| Sept. 6 | R. S. Hawley | 3.29 | 17.1 | Nov. 23 | do | 2.25 | 4.9 |
| Oct. 10 | Hawley and Taylor | 2.73 | 4.4 | Dec. 11 | do | 1.92 | 1.7 |

*Daily gage height, in feet, of A. O. Collins's canal near Bishop, Cal., for 1903–1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | | 2.06 | 11 | 2.00 | 2.02 | 21 | 2.10 | 2.07 |
| 2 | | 2.10 | 12 | 1.80 | 2.03 | 22 | 2.04 | 2.20 |
| 3 | | 2.10 | 13 | 1.80 | 2.07 | 23 | 2.10 | 2.30 |
| 4 | | 2.10 | 14 | 1.80 | 2.02 | 24 | 2.10 | 2.40 |
| 5 | | 2.01 | 15 | 1.80 | 2.03 | 25 | 2.03 | 2.50 |
| 6 | | 2.01 | 16 | 1.70 | 2.04 | 26 | 2.03 | 2.40 |
| 7 | | 2.01 | 17 | 1.82 | 2.14 | 27 | 2.10 | 2.70 |
| 8 | | 2.01 | 18 | 1.74 | 2.10 | 28 | 2.01 | 2.40 |
| 9 | | 2.01 | 19 | 2.20 | 2.07 | 29 | 2.10 | 2.04 |
| 10 | | 2.02 | 20 | 2.12 | 2.09 | 30 | 2.00 | 2.40 |
| | | | | | | 31 | 2.04 | |

*Daily gage height, in feet, of [illegible] canal near Bishop, Cal., [illegible]*

| Day. | Oct. | Nov. | Dec. | Jan. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4 | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 5 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] | | [illegible] | [illegible] | |
| 9 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 31 | [illegible] | .... | [illegible] | ...... | [illegible] | .... | [illegible] | | [illegible] | [illegible] | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5 | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 2.4 | [illegible] |
| 2 | [illegible] | [illegible] | ...... | ...... | ...... | | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] |
| 3 | [illegible] | ...... | ...... | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| 4 | [illegible] | ...... | ...... | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| 5 | [illegible] | ...... | ...... | ...... | ...... | ...... | | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | ...... | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | ...... | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| 8 | [illegible] | ...... | ...... | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| 9 | [illegible] | ...... | ...... | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | ...... | ...... | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | ...... | [illegible] | ...... | ...... | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | ...... | ...... | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | ...... | ...... | ...... | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | ...... | ...... | [illegible] | ...... | ...... | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 15 | [illegible] | [illegible] | ...... | ...... | [illegible] | ...... | [illegible] | [illegible] | [illegible] | ...... | [illegible] | ...... |
| 16 | ...... | [illegible] | ...... | ...... | [illegible] | ...... | ...... | 2.4 | [illegible] | ...... | [illegible] | ...... |
| 17 | [illegible] | [illegible] | ...... | ...... | [illegible] | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... |
| 18 | [illegible] | [illegible] | ...... | ...... | [illegible] | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... |
| 19 | ...... | [illegible] | ...... | ...... | [illegible] | [illegible] | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... |
| 20 | ...... | ...... | ...... | ...... | [illegible] | [illegible] | ...... | ...... | [illegible] | ...... | [illegible] | ...... |
| 21 | ...... | ...... | ...... | ...... | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 22 | ...... | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 23 | ...... | ...... | ...... | ...... | [illegible] | ...... | ...... | [illegible] | [illegible] | [illegible] | ...... | ...... |
| 24 | ...... | ...... | ...... | ...... | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 25 | ...... | ...... | 2.4 | ...... | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 26 | [illegible] | ...... | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | ...... |
| 27 | [illegible] | [illegible] | ...... | ...... | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... |
| 28 | ...... | [illegible] | [illegible] | ...... | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... |
| 29 | [illegible] | [illegible] | ...... | ...... | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... | [illegible] | ...... |
| 30 | [illegible] | [illegible] | ...... | ...... | ...... | [illegible] | ...... | [illegible] | [illegible] | [illegible] | ...... | ...... |
| 31 | [illegible] | ...... | [illegible] | ...... | ...... | ...... | [illegible] | ...... | [illegible] | ...... | ...... | ...... |

NOTE.—[illegible] days for which no gage heights are given except during November and December, [illegible] incomplete.

*Rating tables for A. O. Collins's canal near Bishop, Cal.*

**January 1 to June 30, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 1.50 | 1 | 2.20 | 12 | 2.90 | 26 | 3.50 | 38 |
| 1.60 | 2 | 2.30 | 14 | 3.00 | 28 | 3.60 | 40 |
| 1.70 | 3 | 2.40 | 16 | 3.10 | 30 | 3.70 | 42 |
| 1.80 | 4 | 2.50 | 18 | 3.20 | 32 | 3.80 | 44 |
| 1.90 | 6 | 2.60 | 20 | 3.30 | 34 | 3.90 | 46 |
| 2.00 | 8 | 2.70 | 22 | 3.40 | 36 | 4.00 | 48 |
| 2.10 | 10 | 2.80 | 24 | | | | |

**July 1 to December 31, 1904.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.40 | 1 | 2.90 | 8 | 3.30 | 16 | 3.70 | 24 |
| 2.50 | 2 | 3.00 | 10 | 3.40 | 18 | 3.80 | 27 |
| 2.60 | 3 | 3.10 | 12 | 3.50 | 20 | 3.90 | 30 |
| 2.70 | 4 | 3.20 | 14 | 3.60 | 22 | 4.00 | 33 |
| 2.80 | 6 | | | | | | |

*Monthly discharge of A. O. Collins's canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| February | 22 | 0 | 12.9 | 486 |
| March | 10 | 3 | 5.6 | 344 |
| April | 16 | 2 | 9 | 536 |
| May | 32 | 2 | 12.8 | 787 |
| June | 50 | 12 | 43.1 | 2,565 |
| July | 33 | 20 | 26 | 1,599 |
| August | 21 | 16 | 18 | 1,107 |
| September | 33 | 10 | 16 | 952 |
| October | 14 | 0 | 5 | 307 |
| November | 2 | 2 | 2 | 119 |
| December | 2 | 0 | [a] 2 | 123 |
| The period | | | | 8,925 |

[a] Estimated.

## DELL CANAL NEAR BISHOP, CAL.

This station was established August 24, 1903, by R. S. Hawley. It was located at a flume 3 miles from the head gate at a point where the canal crosses a slough in Sanders's field.

The channel is straight for 150 feet above and for 200 feet below the station. The current is sluggish at all times.

Discharge measurements were made from a bridge across the flume. The gage was a vertical rod fastened to the flume.

*Discharge measurements of Dell canal near Bishop, Cal., in 1903–1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* | | | *Feet.* | *Sec.-ft.* |
| 1903. | | | | 1904. | | | |
| Aug. 11 | R. S. Hawley | | 24.2 | Nov. 17 | R. J. Taylor | 1.05 | 12.0 |
| 20 | do | | 11.0 | Dec. 12 | do | 1.10 | 11.9 |
| 24 | do | | 10.0 | | | | |
| 24 | do | 0.85 | 8.0 | 1905. | | | |
| Sept. 4 | do | .78 | 7.0 | Mar. 10 | R. J. Taylor | 1.40 | 24.0 |
| 22 | do | 1.47 | 19.6 | Apr. 14 | J. S. Evans | 1.20 | 16.4 |
| Oct. 7 | do | 1.52 | 19.0 | 28 | do | 1.35 | 23.0 |
| | | | | May 11 | do | 1.48 | 26.0 |
| 1904. | | | | June 26 | do | 1.60 | 22.0 |
| Mar. 16 | R. S. Hawley | 1.40 | 22.0 | July 6 | do | 1.70 | 24.0 |
| Apr. 15 | do | 1.31 | 17.9 | Aug. 2 | do | 1.30 | 17.2 |
| May 28 | do | 1.60 | 19.0 | Sept. 6 | do | 1.31 | 16.8 |
| June 20 | do | 1.80 | 23.0 | 28 | do | 1.12 | 11.6 |
| July 14 | Clausen and Barnes | 1.80 | 16.9 | Oct. 30 | F. R. S. Buttemer | 1.22 | 13.7 |
| Aug. 11 | L. M. Barnes | 1.90 | 22.0 | Nov. 18 | do | 1.35 | 16.6 |
| Sept. 8 | R. S. Hawley | 1.39 | 14.5 | Dec. 5 | do | .62 | 3.0 |

*Daily gage height, in feet, of Dell canal near Bishop, Cal., for 1903–1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | | 0.79 | 11 | | 0.80 | 21 | | 0.79 |
| 2 | | .80 | 12 | | .80 | 22 | | .80 |
| 3 | | .80 | 13 | | .80 | 23 | 0.85 | .81 |
| 4 | | .79 | 14 | | .79 | 24 | .85 | .81 |
| 5 | | .79 | 15 | | .79 | 25 | .86 | .80 |
| 6 | | | 16 | | .80 | 26 | .86 | .81 |
| 7 | | .78 | 17 | | .80 | 27 | | |
| 8 | | .78 | 18 | | .78 | 28 | .85 | .78 |
| 9 | | .79 | 19 | | .78 | 29 | .85 | .78 |
| 10 | | .80 | 20 | | | 30 | | .79 |
| | | | | | | 31 | | |

| Day. | Oct. | Nov. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | |
| 1 | 0.80 | 0.90 | 1.40 | | 1.30 | 1.60 | 1.80 | 1.80 | 1.90 |
| 2 | .80 | .90 | | | | | | 1.80 | |
| 3 | .81 | .90 | | | 1.30 | 1.60 | 1.80 | | 1.90 |
| 4 | | .91 | | | | 1.60 | | 1.80 | |
| 5 | .80 | .91 | | | 1.40 | | 1.80 | | 1.90 |
| 6 | .80 | .92 | | 1.30 | | 1.60 | | 1.80 | |
| 7 | .81 | .92 | | | 1.30 | | 1.80 | | 1.90 |
| 8 | .81 | | | 1.30 | | 1.60 | | 1.80 | |
| 9 | .80 | .95 | | | 1.40 | | 1.70 | | 1.90 |
| 10 | .80 | .94 | | 1.40 | | 1.60 | | 1.90 | |
| 11 | | .95 | | 1.40 | 1.50 | | 1.70 | | |
| 12 | .82 | .95 | | | | 1.60 | | 1.90 | 1.90 |
| 13 | .82 | 1.01 | | 1.30 | 1.60 | | 1.80 | | |
| 14 | .83 | 1.02 | | | | 1.70 | | 1.90 | 1.90 |
| 15 | .83 | | | 1.30 | 1.60 | | | | |
| 16 | .83 | 1.06 | 1.40 | | | 1.80 | 1.70 | 1.90 | 1.90 |
| 17 | .84 | 1.08 | | 1.30 | 1.60 | | | | |
| 18 | | 1.11 | | | | 1.80 | 1.70 | 1.90 | 1.90 |
| 19 | .84 | 1.12 | | 1.40 | 1.60 | | | | |
| 20 | .85 | 1.14 | | | | 1.80 | | 1.90 | 1.90 |
| 21 | .86 | 1.13 | | | 1.60 | | 1.80 | 1.90 | |
| 22 | .86 | 1.12 | 1.40 | 1.40 | | 1.80 | | | 1.90 |
| 23 | .86 | 1.11 | | | 1.70 | | 1.80 | 1.90 | |
| 24 | .87 | 1.12 | | 1.40 | | 1.80 | | | 1.90 |
| 25 | .88 | 1.15 | | | 1.70 | | 1.80 | 1.90 | |
| 26 | .88 | 1.16 | | 1.30 | | 1.80 | | | 1.90 |
| 27 | .89 | 1.12 | | | 1.70 | | 1.80 | 1.90 | |
| 28 | .81 | (a) | | 1.30 | 1.60 | 1.80 | | 1.90 | 1.90 |
| 29 | .89 | | | | | | | | |
| 30 | .89 | | | 1.30 | 1.60 | 1.80 | 1.80 | 1.90 | 1.90 |
| 31 | .89 | | | | | | | | |

record obtained from Nov. 27 to Dec. 31, 1903, when the water was turned out.

*Daily gage height, in feet, of Dell canal near Bishop, Cal., in 1903–1905*—Continued.

| Day. | Feb. | Mar. | Apr. | Nov. | Dec. | Day. | Feb. | Mar. | Apr. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | 1905. | | | | | |
| 1 | | | 1.3 | | | 16 | | 1.4 | | | 0.8 |
| 2 | | 1.4 | | | 0.9 | 17 | | | | | |
| 3 | | | | | | 18 | | 1.4 | | 1.35 | |
| 4 | | 1.4 | | | .8 | 19 | | | | | |
| 5 | | | | | | 20 | | 1.4 | | 1.3 | |
| 6 | | 1.4 | | | .6 | 21 | | | | | |
| 7 | | | | | | 22 | | 1.4 | | 1.3 | |
| 8 | | 1.4 | | | .6 | 23 | | | | | |
| 9 | | | | | | 24 | | 1.2 | | 1.3 | |
| 10 | | 1.4 | | | .6 | 25 | | | | | |
| 11 | | | | | | 26 | 1.4 | 1.2 | | 1.3 | |
| 12 | | 1.4 | | | .8 | 27 | | | | | |
| 13 | | | | | | 28 | 1.4 | 1.2 | | 1.4 | |
| 14 | | 1.4 | | | .8 | 29 | | | | | |
| 15 | | | | | | 30 | | 1.2 | | 1.35 | |
| | | | | | | 31 | | | | | |

NOTE.—Canal dry from Jan. 1 to Feb. 29 and Mar. 23 to Apr. 5, 1904. No record for other days for which gage heights are not given.

*Monthly discharge of Dell canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| March | 21 | 0 | 15 | 922 |
| April | 21 | 0 | 16 | 952 |
| May | 21 | 9 | 15.7 | 970 |
| June | 24 | 18 | 21.2 | 1,304 |
| July | 18 | 15 | 16.1 | 984 |
| August | 22 | 18 | 21 | 1,291 |
| September | 22 | 22 | 22 | 1,309 |
| The period | | | | 7,732 |

NOTE.—Discharge interpolated for days on which gage was not read. The discharge has been obtained indirectly from measurements.

### BIG PINE & OWENS RIVER CANAL NEAR BISHOP, CAL.

This station was established August 4, 1903. It was located at a footbridge near the house of William Oliver, the observer. It is 7½ miles south and 3 miles east of Bishop.

The channel is straight for 600 feet above and 300 feet below the station. The current is sluggish. Both banks are high and are not liable to overflow. The bed of the stream is sandy and somewhat shifting.

Discharge measurements were made from the footbridge.

The gage was a vertical rod securely nailed to the footbridge.

[illegible] near Bishop, [illegible] 1903–1905.

| Date | [illegible] | [illegible] | [illegible] | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Feet. [illegible] | Sec.-ft. [illegible] |

[illegible] near Bishop, [illegible]

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Big Pine & Owens River canal near Bishop, Cal., for 1900–1905*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 1 | 2.7 | 1.45 | 1.4 | 1.2 | 1.4 | 1.2 | 1.15 | 1.4 | 2.0 | 1.8 | 1.1 | 1.2 |
| 2 | 2.65 | 1.4 | 1.4 | 1.2 | 1.4 | 1.2 | 1.15 | 1.8 | 1.85 | 1.8 | 1.1 | 1.1 |
| 3 | 2.6 | 1.4 | 1.3 | 1.2 | 1.4 | 1.15 | 1.15 | 1.8 | 1.8 | 1.8 | 1.1 | 1.2 |
| 4 | 2.65 | 1.4 | 1.4 | 1.2 | 1.3 | 1.15 | 1.15 | 1.9 | 1.8 | 1.8 | 1.1 | 1.2 |
| 5 | 2.65 | 1.4 | 1.4 | 1.2 | 1.25 | 1.15 | 1.15 | 1.7 | 1.8 | 1.8 | 1.0 | 1.2 |
| 6 | 1.65 | 1.4 | 1.4 | 1.25 | 1.25 | 1.15 | 1.15 | 1.7 | 1.7 | 1.7 | 1.1 | 1.2 |
| 7 | 1.7 | 1.35 | 1.3 | 1.3 | 1.25 | 1.15 | 1.1 | 1.5 | 1.7 | 1.7 | 1.1 | 1.2 |
| 8 | 1.6 | 1.35 | 1.25 | 1.3 | 1.15 | 1.15 | 1.1 | 1.5 | 1.7 | 2.0 | 1.1 | 1.2 |
| 9 | 1.6 | 1.35 | 1.2 | 1.25 | 1.15 | 1.1 | ....... | 1.6 | 1.95 | 2.05 | 1.2 | 1.2 |
| 10 | 1.55 | 1.35 | 1.2 | 1.25 | 1.2 | 1.1 | ....... | 1.55 | 2.15 | 2.2 | 1.2 | 1.2 |
| 11 | 1.55 | 1.35 | 1.25 | 1.25 | 1.2 | 1.1 | ....... | 1.55 | 2.1 | 2.25 | 1.2 | 1.3 |
| 12 | 2.0 | 1.35 | 1.2 | 1.25 | 1.2 | 1.15 | ....... | 1.5 | 2.3 | 2.35 | 1.2 | 1.3 |
| 13 | 1.65 | 1.35 | 1.2 | 1.25 | 1.2 | 1.5 | ....... | 1.5 | 2.45 | 2.4 | 1.2 | 1.2 |
| 14 | 1.55 | 1.35 | 1.2 | 1.25 | 1.15 | 1.75 | 1.35 | 1.5 | 2.65 | 2.4 | 1.2 | 1.2 |
| 15 | 1.55 | 1.35 | 1.2 | 1.3 | 1.15 | 1.55 | 1.4 | 1.5 | 2.7 | 2.25 | 1.2 | 1.3 |
| 16 | 1.5 | 1.35 | 1.2 | 1.4 | 1.2 | 1.55 | 1.35 | 1.5 | 2.8 | 2.1 | 1.2 | 1.3 |
| 17 | 1.5 | 1.35 | 1.2 | 1.4 | 1.2 | 1.4 | 1.35 | 1.55 | 1.8 | 2.05 | 1.2 | 1.3 |
| 18 | 1.5 | 1.35 | 1.2 | 1.35 | 1.2 | 1.4 | 1.45 | 1.6 | 1.8 | 1.8 | 1.2 | 1.3 |
| 19 | 1.45 | 1.35 | 1.2 | 1.35 | 1.2 | 1.35 | 1.3 | 1.8 | 1.85 | 1.7 | 1.1 | 1.1 |
| 20 | 1.45 | 1.35 | 1.2 | 1.4 | 1.2 | 1.35 | 1.3 | 2.1 | 1.7 | 1.6 | 1.1 | 1.15 |
| 21 | 1.45 | 1.4 | 1.2 | 1.4 | 1.15 | 1.35 | 1.15 | 2.15 | 1.65 | 2.0 | 1.0 | 1.15 |
| 22 | 1.45 | 1.4 | 1.2 | 1.35 | 1.15 | 1.35 | 1.15 | 2.25 | 1.7 | 1.9 | 1.0 | 1.1 |
| 23 | 1.45 | 1.35 | 1.25 | 1.35 | 1.15 | 1.1 | 1.1 | 2.2 | 1.8 | 2.0 | 1.5 | 1.1 |
| 24 | 1.5 | 1.35 | 1.25 | 1.35 | 1.25 | 1.1 | 1.1 | 2.25 | 2.2 | 1.6 | 1.6 | 1.1 |
| 25 | 1.5 | 1.35 | 1.25 | 1.35 | 1.25 | 1.1 | 1.1 | 2.0 | 2.2 | 1.4 | 1.5 | 1.2 |
| 26 | 1.5 | 1.35 | 1.25 | 1.35 | 1.25 | 1.1 | 1.45 | 1.8 | 1.9 | 1.3 | 1.4 | 1.2 |
| 27 | 1.5 | 1.35 | 1.2 | 1.3 | 1.3 | 1.2 | 1.4 | 2.25 | 1.8 | 1.3 | 1.4 | 1.15 |
| 28 | 1.5 | 1.4 | 1.2 | 1.3 | 1.2 | 1.2 | 1.4 | 2.25 | 1.6 | 1.2 | 1.4 | 1.15 |
| 29 | 1.5 | 1.4 | 1.2 | 1.3 | ....... | 1.2 | 1.4 | 2.45 | 1.5 | 1.1 | 1.2 | 1.15 |
| 30 | 1.5 | 1.4 | 1.2 | 1.25 | ....... | 1.1 | 1.4 | 2.4 | 1.8 | 1.1 | 1.3 | 1.15 |
| 31 | 1.45 | ....... | 1.3 | 1.25 | ....... | 1.1 | ....... | 2.1 | ....... | 1.1 | 1.3 | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | 1905. | | | | 1905. | | | |
| 1 | 1.4 | 2.55 | 1.4 | 11 | 2.15 | 1.2 | 1.4 | 21 | 2.35 | 1.3 | 1.35 |
| 2 | 1.3 | 2.55 | 1.45 | 12 | 2.2 | 1.2 | 1.4 | 22 | 2.35 | 1.25 | 1.35 |
| 3 | 1.4 | 2.55 | 1.5 | 13 | 2.2 | 1.2 | 1.4 | 23 | 2.35 | 1.25 | 1.35 |
| 4 | 1.5 | 2.5 | 1.5 | 14 | 2.1 | 1.2 | 1.4 | 24 | 2.35 | 1.25 | 1.3 |
| 5 | 1.65 | 2.5 | 1.45 | 15 | 2.15 | 1.2 | 1.4 | 25 | 2.35 | 1.3 | 1.3 |
| 6 | 1.9 | 2.25 | 1.45 | 16 | 2.15 | 1.2 | 1.4 | 26 | 2.35 | 1.3 | 1.4 |
| 7 | 1.9 | 2.3 | 1.45 | 17 | 2.3 | 1.3 | 1.4 | 27 | 2.35 | 1.4 | 1.4 |
| 8 | 1.8 | 2.3 | 1.45 | 18 | 2.3 | 1.4 | 1.4 | 28 | 2.45 | 1.4 | 1.4 |
| 9 | 2.0 | 2.3 | 1.45 | 19 | 2.35 | 1.4 | 1.4 | 29 | 2.45 | 1.4 | 1.3 |
| 10 | 2.1 | 2.55 | 1.4 | 20 | 2.35 | 1.35 | 1.4 | 30 | 2.5 | 1.4 | 1.3 |
| | | | | | | | | 31 | 2.55 | ...... | 1.3 |

NOTE.—Canal dry Jan. 1-2, 1904; Apr. 8-14, 1904, and Apr. 9-13, 1905.

*Rating table for Big Pine & Owens River canal near Bishop, Cal., from January 1 to December 31, 1904.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.20 | 5 | 1.80 | 16 | 2.40 | 30 | 3.00 | 68 |
| 1.30 | 6 | 1.90 | 18 | 2.50 | 33 | 3.10 | 76 |
| 1.40 | 8 | 2.00 | 20 | 2.60 | 38 | 3.20 | 85 |
| 1.50 | 10 | 2.10 | 22 | 2.70 | 43 | 3.30 | 94 |
| 1.60 | 12 | 2.20 | 24 | 2.80 | 50 | 3.40 | 103 |
| 1.70 | 14 | 2.30 | 27 | 2.90 | 59 | | |

*Monthly discharge of Bishop Creek near Bishop, Cal., for 1905–1911*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1905–6.** | | | | | |
| July | [illegible] | 310 | a [illegible] | 42,[illegible] | |
| August | [illegible] | [illegible] | [illegible] | 21,[illegible] | |
| September | [illegible] | [illegible] | [illegible] | 7,[illegible] | |
| The year | [illegible] | [illegible] | 164 | [illegible] | |
| **1906–7.** | | | | | |
| October | [illegible] | [illegible] | 45.[illegible] | 2,7[illegible] | |
| November | [illegible] | [illegible] | [illegible] | 1,[illegible] | |
| December | [illegible] | [illegible] | [illegible] | [illegible] | |
| January | [illegible] | [illegible] | [illegible] | [illegible] | C. |
| February | [illegible] | [illegible] | [illegible] | [illegible] | C. |
| March | [illegible] | [illegible] | [illegible] | [illegible] | C. |
| April | [illegible] | [illegible] | [illegible] | 4,310 | C. |
| May | [illegible] | 101 | [illegible] | [illegible] | B. |
| June | [illegible] | [illegible] | [illegible] | 17,[illegible] | D. |
| July | [illegible] | [illegible] | 154 | 31,[illegible] | D. |
| August | [illegible] | [illegible] | 231 | 14,[illegible] | B. |
| September | [illegible] | 41 | [illegible] | 4,[illegible] | B. |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1907–8.** | | | | | |
| October | [illegible] | 41 | [illegible] | 4,[illegible] | B. |
| November | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| December | [illegible] | [illegible] | 52.[illegible] | [illegible] | B. |
| January | [illegible] | 44 | [illegible] | [illegible] | B. |
| February | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| March | 314 | [illegible] | [illegible] | [illegible] | B. |
| April | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| May | [illegible] | [illegible] | [illegible] | 4,710 | B. |
| June | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| July | [illegible] | [illegible] | [illegible] | 9,220 | B. |
| August | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| September | [illegible] | [illegible] | [illegible] | 4,[illegible] | B. |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1908–9.** | | | | | |
| October | [illegible] | [illegible] | [illegible] | 3,710 | B. |
| November | [illegible] | 44 | [illegible] | 3,310 | B. |
| December | [illegible] | 44 | [illegible] | 3,040 | B. |
| January | [illegible] | [illegible] | [illegible] | 2,[illegible] | A. |
| February | [illegible] | [illegible] | [illegible] | 2,[illegible] | A. |
| March | [illegible] | [illegible] | [illegible] | 2,870 | A. |
| April | [illegible] | [illegible] | [illegible] | 3,530 | A. |
| May | [illegible] | [illegible] | [illegible] | 7,[illegible] | A. |
| June | [illegible] | [illegible] | [illegible] | 22,000 | B. |
| July | [illegible] | [illegible] | [illegible] | 22,[illegible] | B. |
| August | 214 | [illegible] | 134 | 8,240 | C. |
| September | [illegible] | [illegible] | [illegible] | 4,640 | B. |
| The year | 713 | [illegible] | 120 | 87,[illegible] | |
| **1909–10.** | | | | | |
| October | 71 | 52 | 61.4 | 3,780 | B. |
| November | 83 | 62 | 60.2 | 4,120 | B. |
| December | 106 | 71 | 85.5 | 5,260 | B. |
| January | 117 | 73 | 83.9 | 5,160 | B. |
| February | 97 | 57 | 77.5 | 4,300 | B. |
| March | 154 | 73 | 124 | 7,630 | B. |
| April | 162 | 39 | 85.7 | 5,100 | B. |
| May | 359 | 62 | 186 | 11,400 | C. |
| June | 198 | 62 | 125 | 7,440 | B. |
| July | 477 | 62 | 134 | 8,240 | C. |
| August | 453 | 52 | 97.6 | 6,000 | C. |
| September | 85 | 17 | 46.9 | 2,790 | B. |
| The year | 477 | 17 | 98.1 | 71,200 | |
| **1910–11.** | | | | | |
| October | 68 | 25 | 50.2 | 3,090 | B. |
| November | 79 | 28 | 52.7 | 3,140 | B. |
| December | 73 | 22 | 55.3 | 3,400 | B. |
| January | 110 | 15 | 63.2 | 3,880 | |
| February | 154 | 57 | 89.5 | 4,970 | |

a Mean for 23 days taken as mean for the month.

[illegible] Monthly estimates for 1907 include diversions above the station. During May–August, 1907, [illegible] were obtained from a 30-foot weir located about 3 miles above the mouth of the canyon above all [illegible].

## RAWSON CANAL NEAR BISHOP, CAL.

This station was established August 7, 1903, by R. S. Hawley. It was located at the county bridge, 2½ miles east of Bishop.

The channel is straight for 100 feet above and below the station, and the current is swift. The right bank is high and the left bank is low. Neither bank is liable to overflow. The bed of the stream is composed of gravel and is permanent.

Discharge measurements were made from the bridge.

The gage was a vertical rod fastened to the bridge.

*Discharge measurements of Rawson canal near Bishop, Cal., in 1903-1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| July 31 | R. S. Hawley | ........ | 17.0 | Mar. 14 | R. J. Taylor | 1.75 | 22 |
| Aug. 7 | .....do | 1.70 | 17.6 | Apr. 1 | J. S. Evans | 1.85 | 26 |
| 11 | .....do | 1.62 | 13.6 | 17 | .....do | 1.60 | 16.9 |
| 17 | .....do | 1.85 | 20.3 | May 2 | .....do | 1.90 | 28 |
| 27 | .....do | 1.73 | 17.1 | 25 | .....do | 1.90 | 27 |
| Sept. 7 | .....do | 1.77 | 18.2 | June 28 | .....do | 1.70 | 18.1 |
| 14 | .....do | 1.81 | 17.1 | July 26 | .....do | 1.30 | 2.1 |
| Oct. 24 | .....do | 1.73 | 15.4 | Aug. 9 | .....do | 1.55 | 14.6 |
| Nov. 27 | .....do | 1.60 | 13.0 | Sept. 5 | .....do | 1.45 | 7.0 |
| | | | | 14 | .....do | 1.50 | 10.6 |
| 1904. | | | | Oct. 3 | .....do | 1.90 | 17.8 |
| Feb. 4 | R. S. Hawley | 1.66 | 16.6 | 25 | F. R. S. Buttemer | 1.05 | 1.2 |
| 11 | .....do | 2.01 | 35 | Nov. 23 | .....do | 1.15 | 1.1 |
| Apr. 2 | .....do | 1.50 | 9.4 | Dec. 11 | .....do | 1.08 | 1.3 |
| 14 | .....do | 1.87 | 27 | | | | |
| June 8 | .....do | 1.96 | 24 | | | | |
| July 12 | Clausen and Barnes | 1.75 | 18.8 | | | | |
| Aug. 6 | L. M. Barnes | 1.80 | 21 | | | | |
| 20 | .....do | 2.23 | 31 | | | | |

*Daily gage height, in feet, of Rawson canal near Bishop, Cal., for 1903-1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | ........ | 1.74 | 11 | 1.60 | 1.77 | 21 | 1.84 | 2.10 |
| 2 | ........ | 1.72 | 12 | 1.80 | 1.85 | 22 | 1.82 | 1.94 |
| 3 | ........ | 1.76 | 13 | 1.90 | 1.90 | 23 | 1.81 | 1.92 |
| 4 | ........ | 1.73 | 14 | 1.90 | 1.72 | 24 | 1.80 | 1.93 |
| 5 | ........ | 1.74 | 15 | 1.85 | 1.80 | 25 | 1.75 | 1.94 |
| 6 | ........ | 1.80 | 16 | 1.80 | 1.85 | 26 | 1.74 | 2.04 |
| 7 | ........ | 1.79 | 17 | 1.86 | 1.93 | 27 | 1.74 | 2.00 |
| 8 | ........ | 1.80 | 18 | 1.82 | 1.94 | 28 | 1.76 | 2.00 |
| 9 | ........ | 1.76 | 19 | 1.81 | 1.99 | 29 | 1.73 | 2.01 |
| 10 | ........ | 1.78 | 20 | 1.86 | 2.10 | 30 | 1.74 | 2.00 |
| | | | | | | 31 | 1.72 | ........ |

| Day. | Oct. | Nov. | Dec. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903-4. | | | | | | | | | | | |
| 1 | 2.00 | 1.59 | 1.65 | ........ | 1.7 | 1.5 | 1.9 | 2.1 | 1.9 | 1.8 | 2.25 |
| 2 | 2.00 | 1.63 | 1.64 | ........ | 1.7 | 1.5 | 1.9 | 1.9 | 1.9 | 1.8 | 2.2 |
| 3 | 1.96 | 1.60 | 1.70 | 1.65 | 1.7 | 1.5 | 1.85 | 1.9 | 1.8 | 1.8 | 2.1 |
| 4 | 1.93 | 1.60 | 1.71 | 1.65 | 1.7 | 1.5 | 1.85 | 1.9 | 1.8 | 1.8 | 2.1 |
| 5 | 1.93 | 1.60 | 1.70 | 1.8 | 1.7 | 1.5 | 1.85 | ........ | 1.8 | 1.8 | 2.0 |
| 6 | 1.94 | 1.63 | 1.35 | 1.9 | 1.7 | 1.5 | 1.9 | ........ | 1.8 | 1.8 | 2.1 |
| 7 | 1.91 | 1.63 | 1.35 | 1.9 | 1.7 | 1.5 | 1.9 | ........ | 1.8 | 1.8 | 2.1 |
| 8 | 1.92 | 1.63 | 1.43 | 1.9 | 1.7 | 1.5 | 1.9 | 2.0 | 1.8 | 1.8 | 2.1 |
| 9 | 2.01 | 1.65 | 1.35 | 1.9 | 1.7 | 1.8 | 1.9 | 1.9 | 1.8 | 1.75 | 2.0 |
| 10 | 2.01 | 1.66 | 1.30 | 1.9 | 1.67 | 1.8 | 1.85 | 1.9 | 1.8 | 1.75 | 2.0 |
| 11 | 1.80 | 1.65 | 1.30 | 2.0 | 1.75 | 1.9 | 1.9 | 1.9 | 1.75 | 1.75 | 2.0 |
| 12 | 1.75 | 1.61 | 1.30 | 2.0 | 1.75 | 2.0 | 1.9 | 2.0 | 1.7 | 1.7 | 2.0 |
| 13 | 1.75 | 1.63 | 1.39 | 2.1 | 1.7 | 2.0 | 1.9 | 2.0 | 1.7 | 1.7 | 2.1 |
| 14 | 1.70 | 1.60 | 1.30 | 2.4 | 1.73 | 1.9 | 1.9 | 2.0 | 1.65 | 1.7 | 2.2 |
| 15 | 1.70 | 1.70 | 1.42 | 2.4 | 1.7 | 1.9 | 2.0 | 2.0 | 1.65 | 1.7 | 2.1 |

*Daily gage height, in feet, of Rawson canal near Bishop, Cal., for 1903–1905*—Con.

| Day. | Oct. | Nov. | Dec. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | |
| 16 | 1.70 | 1.80 | 1.44 | 1.85 | 1.7 | 1.9 | 2.0 | 2.0 | 1.8 | 1.75 | 2.1 |
| 17 | 1.65 | 1.92 | 1.45 | 1.8 | 1.7 | 1.65 | 2.0 | 2.0 | 1.8 | 1.7 | 2.1 |
| 18 | 1.65 | 1.92 | 1.1 | 1.75 | 1.7 | 1.65 | 2.0 | 2.0 | 1.9 | 1.65 | 2.2 |
| 19 | 1.80 | 1.93 | 1.1 | 1.75 | 1.7 | 1.65 | 2.0 | 2.0 | 1.9 | 1.9 | 2.2 |
| 20 | 1.75 | 1.90 | 1.1 | 1.7 | 1.75 | 1.85 | 1.95 | 2.0 | 1.9 | 1.9 | 2.3 |
| 21 | 1.70 | 1.90 | 1.1 | 1.7 | 1.7 | 1.9 | 2.0 | 2.0 | 1.95 | 2.2 | 2.3 |
| 22 | 1.65 | 1.90 | 1.2 | 1.8 | 1.65 | 1.9 | 1.9 | 2.0 | 1.95 | 2.2 | 2.3 |
| 23 | 1.70 | 1.91 | 1.1 | 1.75 | 1.65 | 1.9 | 1.9 | 2.0 | 2.2 | 2.25 | 2.3 |
| 24 | 1.73 | 1.90 | 1.1 | 1.75 | 1.7 | 1.9 | 1.9 | 1.9 | 1.4 | 2.25 | 2.3 |
| 25 | 1.75 | 1.90 | 1.1 | 1.7 | 1.7 | 1.9 | 1.9 | 1.9 | 1.4 | 2.3 | 2.3 |
| 26 | 1.76 | 1.90 | 1.3 | 1.75 | 1.56 | 1.85 | 1.9 | 1.9 | ........ | 2.3 | 2.3 |
| 27 | 1.77 | 1.53 | 1.3 | 1.7 | 1.5 | 1.9 | 1.9 | 1.9 | ........ | 2.3 | 2.4 |
| 28 | 1.63 | 1.50 | 1.3 | 1.7 | 1.5 | 1.9 | 1.9 | 1.9 | 1.95 | 2.3 | ........ |
| 29 | 1.59 | 1.51 | 1.3 | 1.7 | 1.56 | 1.9 | 1.9 | 1.9 | 1.95 | 2.3 | ........ |
| 30 | 1.59 | 1.65 | 1.3 | ........ | 1.56 | 1.9 | 1.9 | 1.9 | 1.85 | 2.25 | ........ |
| 31 | 1.59 | ........ | 1.3 | ........ | 1.5 | ........ | 2.0 | ........ | 1.8 | 2.3 | ........ |

| Day. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | | | |
| 1 | ........ | 1.8 | 1.7 | 1.8 | 0.8 | 0.9 | 1.3 | 1.8 |
| 2 | ........ | ........ | 1.7 | 1.8 | .9 | .9 | ........ | 1.8 |
| 3 | ........ | 1.8 | 1.7 | 1.8 | .9 | .8 | 1.3 | 1.8 |
| 4 | ........ | 1.8 | 1.9 | 1.8 | .9 | .8 | 1.5 | 1.8 |
| 5 | ........ | 1.8 | ........ | 1.7 | .9 | .8 | 1.5 | 1.8 |
| 6 | 1.4 | ........ | 1.9 | 1.9 | .8 | .8 | 1.5 | 1.8 |
| 7 | 1.4 | 1.7 | 1.9 | 1.9 | .8 | .8 | 1.7 | 1.6 |
| 8 | 1.5 | 1.7 | 1.8 | 1.9 | .8 | .8 | 1.7 | 1.4 |
| 9 | 1.5 | ........ | 1.8 | 1.8 | .8 | .8 | 1.7 | 1.4 |
| 10 | 1.6 | 1.7 | 1.8 | 1.8 | .8 | .8 | 1.7 | 1.4 |
| 11 | 1.6 | 1.7 | 1.8 | 1.9 | .7 | .8 | 1.7 | 1.4 |
| 12 | 1.6 | 1.7 | 1.8 | 1.8 | .7 | .8 | 1.7 | 1.6 |
| 13 | 1.8 | ........ | 1.8 | 1.8 | .7 | .9 | 1.6 | 1.6 |
| 14 | 1.8 | 1.7 | 1.8 | 1.7 | .8 | .9 | 1.6 | ........ |
| 15 | ........ | 1.6 | 1.9 | 1.0 | .8 | .0 | 1.6 | ........ |
| 16 | ........ | 1.6 | 1.9 | .9 | .8 | ........ | 1.6 | ........ |
| 17 | ........ | 1.6 | 1.9 | 1.4 | .8 | .9 | 1.6 | ........ |
| 18 | ........ | 1.6 | 1.9 | 1.4 | .8 | .9 | 1.6 | ........ |
| 19 | ........ | 1.6 | 1.9 | ........ | .8 | .9 | 1.6 | ........ |
| 20 | ........ | 1.7 | 1.9 | ........ | .8 | ........ | 1.6 | ........ |
| 21 | ........ | 1.7 | 1.8 | ........ | .8 | .7 | 1.7 | ........ |
| 22 | ........ | 1.7 | 1.9 | .6 | .7 | .7 | 1.7 | ........ |
| 23 | ........ | ........ | 1.9 | .8 | .7 | .7 | ........ | ........ |
| 24 | ........ | 1.7 | 1.8 | .9 | .7 | .7 | 1.7 | ........ |
| 25 | ........ | 1.7 | 1.8 | .9 | .7 | .7 | 1.7 | ........ |
| 26 | ........ | 1.7 | 1.8 | .9 | ........ | 1.3 | 1.7 | ........ |
| 27 | ........ | 1.7 | 1.8 | .8 | ........ | 1.3 | 1.7 | ........ |
| 28 | ........ | 1.7 | 1.8 | .8 | ........ | 1.3 | 1.7 | ........ |
| 29 | ........ | 1.7 | 1.7 | .8 | .9 | ........ | 1.7 | ........ |
| 30 | 1.8 | 1.7 | 1.7 | .8 | .9 | 1.3 | ........ | ........ |
| 31 | 1.8 | ........ | 1.7 | ........ | .9 | ........ | ........ | ........ |

NOTE.—Canal dry from Jan. 1 to Feb. 2, 1904, June 5–7, 1904, July 26–27, 1904, Sept. 28, 1904, to Mar. 5, 1905, and Oct. 14 to Dec. 31, 1905.

*Rating tables for Rawson canal near Bishop, Cal.*

**January 1 to May 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.30 | 1 | 1.60 | 14 | 1.90 | 29 | 2.20 | 48 |
| 1.40 | 5 | 1.70 | 18 | 2.00 | 35 | 2.30 | 55 |
| 1.50 | 9 | 1.80 | 23 | 2.10 | 41 | | |

**June 1 to September 30, 1904.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.40 | 6 | 1.70 | 16 | 2.00 | 26 | 2.30 | 37 |
| 1.50 | 9 | 1.80 | 19 | 2.10 | 30 | 2.40 | 40 |
| 1.60 | 12 | 1.90 | 23 | 2.20 | 33 | | |

*Monthly discharge of Rawson canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| February | 59 | 0 | 26.2 | 1,403 |
| March | 20 | 9 | 16.6 | 1,018 |
| April | 35 | 9 | 22.1 | 1,319 |
| May | 35 | 26 | 30 | 1,845 |
| June | 27 | 0 | 23.1 | 1,374 |
| July | 25 | 0 | 20 | 1,230 |
| August | 37 | 16 | 26 | 1,599 |
| September | 40 | 0 | 29 | 1,726 |
| The period | | | | 11,514 |

## A. O. COLLINS'S CANAL NEAR BISHOP, CAL.

This station was established August 7, 1903. It was located at the county bridge 3 miles east of Bishop.

The channel is straight for 100 feet above and 50 feet below the station. The current is sluggish. Both banks are high and are not liable to overflow. The bed of the stream is sandy and shifting.

The gage was a vertical rod fastened to the right bank just above the bridge, from which discharge measurements were made.

*Discharge measurements of A. O. Collins's canal near Bishop, Cal., in 1903-1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | Feet. | Sec.-ft. | 1904. | | Feet. | Sec.-ft. |
| July 31 | R. S. Hawley | | 12.1 | Oct. 14 | Clapp, Hawley, and Taylor. | 2.58 | 2.8 |
| Aug. 7 | do | 2.2 | 8.3 | | | | |
| 11 | do | 2.0 | 3.9 | Nov. 1 | R. J. Taylor | 2.50 | 2.1 |
| 17 | do | 1.82 | 2.6 | Dec. 1 | do | 2.48 | 1.8 |
| 27 | do | 2.1 | 8.8 | | | | |
| Sept. 7 | do | 2.1 | 7.9 | 1905. | | | |
| 14 | do | 2.1 | 7.6 | Mar. 14 | R. J. Taylor | 2.90 | 25 |
| Oct. 23 | do | 1.65 | 1.2 | Apr. 1 | J. S. Evans | 2.00 | 2.1 |
| | | | | May 2 | do | 3.00 | 25 |
| 1904. | | | | June 28 | do | 2.75 | 18.4 |
| Feb. 4 | R. S. Hawley | 1.80 | 5.2 | July 26 | do | 2.90 | 18.4 |
| Apr. 14 | do | 1.95 | 7.8 | Aug. 9 | do | 2.65 | 14.0 |
| June 8 | do | 3.67 | 40 | Sept. 5 | do | 2.38 | 7.3 |
| 12 | Clausen and Barnes | 3.80 | 28 | 14 | do | 2.33 | 6.5 |
| Aug. 6 | L. M. Barnes | 3.45 | 19.8 | Oct. 3 | do | 2.80 | 15.3 |
| 20 | do | 3.35 | 14.3 | 25 | F. R. S. Buttemer | | 0 |
| Sept. 6 | R. S. Hawley | 3.29 | 17.1 | Nov. 23 | do | 2.25 | 4.9 |
| Oct. 10 | Hawley and Taylor | 2.73 | 4.4 | Dec. 11 | do | 1.92 | 1.7 |

*Daily gage height, in feet, of A. O. Collins's canal near Bishop, Cal., for 1903-1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1903. | | | 1903. | | | 1903. | | |
| 1 | | 2.06 | 11 | 2.00 | 2.02 | 21 | 2.10 | 2.07 |
| 2 | | 2.10 | 12 | 1.80 | 2.03 | 22 | 2.04 | 2.20 |
| 3 | | 2.10 | 13 | 1.80 | 2.07 | 23 | 2.10 | 2.30 |
| 4 | | 2.10 | 14 | 1.80 | 2.02 | 24 | 2.10 | 2.40 |
| 5 | | 2.01 | 15 | 1.80 | 2.03 | 25 | 2.03 | 2.50 |
| 6 | | 2.01 | 16 | 1.70 | 2.04 | 26 | 2.03 | 2.40 |
| 7 | | 2.01 | 17 | 1.82 | 2.14 | 27 | 2.10 | 2.70 |
| 8 | | 2.01 | 18 | 1.74 | 2.10 | 28 | 2.01 | 2.40 |
| 9 | | 2.01 | 19 | 2.20 | 2.07 | 29 | 2.10 | 2.04 |
| 10 | | 2.02 | 20 | 2.12 | 2.09 | 30 | 2.00 | 2.40 |
| | | | | | | 31 | 2.04 | |

[illegible] from [illegible]

| [illegible] | [illegible] | [illegible] | Discharge. | [illegible] | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. |
| [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Monthly discharge of [illegible] canal near Citrus, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off total in acre-feet. |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| [illegible] | [illegible] | 11 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 31 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 40 | [illegible] |
| [illegible] | [illegible] | [illegible] | 44 | [illegible] |
| [illegible] | [illegible] | [illegible] | 35 | [illegible] |
| [illegible] | [illegible] | 31 | 40 | [illegible] |

[illegible] From [illegible] to June 30 no rating table was made. [illegible]

## STEVENS CANAL NEAR CITRUS, CAL.

This station was established August 27, 1903. It was located at the waste gate of the canal, 3½ miles north of Citrus.

The channel is straight for 300 feet above and 200 feet below the station. The current is sluggish. Both banks are high and are not liable to overflow. The bed of the stream is composed of gravel and earth and is fairly permanent.

Discharge measurements were made by wading.

The gage was a vertical rod fastened to the waste gate.

*Discharge measurements of Stevens canal near Citrus, Cal., in 1903–1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | Feet. | Sec.-ft. | | | Feet. | Sec.-ft. |
| 1903. | | | | 1904. | | | |
| Aug. 27 | R. S. Hawley | | 17.7 | July 22 | L. M. Barnes | 3.20 | [illegible] |
| 27 | do | 2.40 | 23.0 | Sept. 12 | R. S. Hawley | 1.70 | [illegible] |
| Sept. 18 | do | 2.40 | 21.3 | | | | |
| | | | | 1905. | | | |
| 1904. | | | | May 29 | J. S. Evans | 2.70 | [illegible] |
| Feb. 24 | R. S. Hawley | 2.10 | 24.0 | Aug. 23 | do | 2.30 | [illegible] |
| Apr. 6 | do | | 10.7 | Sept. 30 | do | 2.35 | [illegible] |
| May 3 | do | 2.20 | 32.0 | Nov. 8 | F. R. S. Buttemer | 1.50 | [illegible] |
| June 9 | do | 3.10 | 58.0 | Dec. 3 | do | 1.65 | [illegible] |
| 24 | do | 3.47 | 54.0 | | | | |

*Daily gage height, in feet, of Stevens canal near Citrus, Cal., for 1903–1905.*

| Day. | Aug. | Sept. |
|---|---|---|
| 1903. | | |
| 1 | | |
| 2 | | 2.30 |
| 3 | | |
| 4 | | 2.30 |
| 5 | | |
| 6 | | |
| 7 | | 2.35 |
| 8 | | |
| 9 | | 2.35 |
| 10 | | |
| 11 | | 2.30 |
| 12 | | |
| 13 | | |
| 14 | | 2.60 |
| 15 | | |
| 16 | | 2.40 |
| 17 | | |
| 18 | | 2.00 |
| 19 | | |
| 20 | | |
| 21 | | 2.40 |
| 22 | | |
| 23 | | 2.00 |
| 24 | | |
| 25 | | 2.00 |
| 26 | | |
| 27 | 2.30 | |
| 28 | 2.30 | 2.30 |
| 29 | | |
| 30 | | 2.35 |
| 31 | 2.30 | |

| Day. | Oct. | Feb. | Mar. | Apr. | May. | Sept. |
|---|---|---|---|---|---|---|
| 1903–4. | | | | | | |
| 1 | | 1.9 | | | | |
| 2 | 2.5 | | | | 2.2 | |
| 3 | | | | | | |
| 4 | | | 2.4 | | | |
| 5 | 2.5 | | | | | |
| 6 | | | | | 2.2 | |
| 7 | 2.5 | | 2.2 | | | |
| 8 | | 1.8 | | | | |
| 9 | | | | | 2.0 | |
| 10 | | | | | | |
| 11 | | | 2.0 | | | |
| 12 | | 1.7 | | | | |
| 13 | | | | | 2.2 | |
| 14 | | | 2.1 | | | |
| 15 | | 1.7 | | | | |
| 16 | | | | | | |
| 17 | | | | 2.2 | | |
| 18 | | | 2.6 | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | 2.6 |
| 22 | | 2.6 | | | | |
| 23 | | | | | 2.3 | 2.6 |
| 24 | | | | | | |
| 25 | | | 2.9 | 2.2 | | |
| 26 | | 2.5 | | | | 2.7 |
| 27 | | | | | | |
| 28 | | | | | | 2.5 |
| 29 | | 2.4 | | | | |
| 30 | | | | | | 2.5 |
| 31 | | | | | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 1 | | | | | 1.6 | 1.9 | | 2.1 | | | | 2.3 |
| 2 | | 1.6 | | 1.6 | | | | | 2.8 | | 2.5 | |
| 3 | 2.5 | | | | 1.6 | 1.8 | 1.5 | 2.2 | | 2.8 | | |
| 4 | | 1.5 | | 1.6 | | | | | | | 2.5 | 2.4 |
| 5 | 2.5 | | 1.5 | | | | 1.5 | 2.3 | 2.8 | 2.9 | | |
| 6 | | | | 1.5 | 1.5 | 1.9 | | | | | | 2.4 |
| 7 | 2.6 | 1.6 | 1.5 | | | | 1.5 | | 2.8 | 2.8 | 2.5 | |
| 8 | | | | | 1.5 | 2.3 | | 2.2 | | | | 2.4 |
| 9 | | 1.5 | 1.5 | 1.5 | | | | | 2.8 | | 2.5 | |
| 10 | 2.5 | | | | 1.5 | 2.3 | 1.5 | 2.2 | | 2.9 | | |
| 11 | | 1.5 | | 1.5 | | | | | | | 2.5 | 2.5 |
| 12 | 2.5 | | 1.5 | | | | 1.6 | 2.2 | 2.8 | 2.9 | | |
| 13 | | | | 1.5 | 1.5 | 2.4 | | | | | | 2.5 |
| 14 | 2.7 | 1.6 | 1.5 | | | | 1.6 | | 2.8 | 2.9 | 2.7 | |
| 15 | | | | | 1.5 | 2.5 | | 2.2 | | | | 2.5 |
| 16 | | 1.6 | 1.5 | 1.5 | | | | | 2.9 | | 2.7 | |
| 17 | 2.8 | | | | 1.5 | 2.6 | 1.6 | 2.2 | | 2.8 | | |
| 18 | | 1.6 | | 1.6 | | | | | | | 2.6 | 2.6 |
| 19 | 2.4 | | 1.5 | | | | 1.6 | 2.2 | 2.9 | 2.7 | | |
| 20 | | | | 1.5 | 1.6 | 2.4 | | | | | | 2.6 |
| 21 | 2.3 | 1.6 | 1.5 | | | | 1.6 | | 2.9 | 2.7 | 2.5 | |
| 22 | | | | | 1.6 | 2.0 | | 2.5 | | | | 2.6 |
| 23 | | 1.6 | 1.5 | 1.5 | | | | | 2.9 | | 2.5 | |
| 24 | 1.6 | | | | 2.0 | 1.5 | 1.6 | | | 2.7 | | |
| 25 | | 1.6 | | 1.5 | | | | | | | 2.5 | 2.6 |
| 26 | 1.5 | | 1.5 | | | | 1.5 | 2.6 | 2.9 | 2.8 | | |
| 27 | | | | 1.5 | 1.9 | 1.5 | | | | | | 2.6 |
| 28 | 1.5 | 1.6 | 1.5 | | | | 2.1 | | 2.7 | 2.8 | 2.4 | |
| 29 | | | | | | 1.5 | | 2.7 | | | | 2.5 |
| 30 | | 1.6 | 1.5 | 1.5 | | | | | 2.8 | | 2.4 | |
| 31 | 1.6 | | | | | 1.5 | | 2.8 | | 2.5 | | |

*Daily gage height, in feet, of Stevens canal near Citrus, Cal., for 1903–1905*—Continued.

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | 1905. | | | | 1905. | | | |
| 1 | | 2.8 | 2.5 | 11 | 2.7 | | 1.7 | 21 | | | |
| 2 | 2.6 | | | 12 | | | | 22 | | 2.6 | 1.7 |
| 3 | | 2.8 | | 13 | 2.7 | 2.8 | 1.7 | 23 | 2.9 | | |
| 4 | 2.6 | | 1.8 | 14 | | | | 24 | | 2.5 | |
| 5 | | | | 15 | | 2.8 | 1.7 | 25 | 2.9 | | 1.7 |
| 6 | 2.6 | 2.8 | 1.8 | 16 | 2.8 | | | 26 | | | |
| 7 | | | | 17 | | 2.8 | | 27 | 2.9 | 2.5 | 1.7 |
| 8 | | 2.8 | 1.8 | 18 | 2.8 | | 1.7 | 28 | | | |
| 9 | 2.7 | | | 19 | | | | 29 | | 2.5 | 1.7 |
| 10 | | 2.8 | | 20 | 2.8 | 2.6 | 1.7 | 30 | 2.8 | | |
| | | | | | | | | 31 | | | |

NOTE.—Water turned out of the canal from Oct. 8, 1903, to Jan. 29, 1904.

*Rating tables for Stevens canal near Citrus, Cal.*

**January 1 to June 30, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.40 | 14 | 1.70 | 17 | 2.00 | 20 | 2.30 | 23 |
| 1.50 | 15 | 1.80 | 18 | 2.10 | 21 | 2.40 | 24 |
| 1.60 | 16 | 1.90 | 19 | 2.20 | 22 | | |

**July 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1.50 | 3.0 | 1.80 | 4.0 | 2.10 | 6 | 2.40 | 9 |
| 1.60 | 3.2 | 1.90 | 4.5 | 2.20 | 7 | 2.50 | 10 |
| 1.70 | 3.5 | 2.00 | 5.0 | 2.30 | 8 | | |

*Monthly discharge of Stevens canal near Citrus, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| February | 26 | 17 | 20.1 | 1,156 |
| March | 24 | 20 | 21.3 | 1,310 |
| April | 22 | 22 | 22 | 1,309 |
| May | 23 | 22 | 22 | 1,353 |
| September 21–30 | 12 | 10 | 11 | 218 |
| October | 12 | 3 | 8 | 492 |
| November | 3 | 2 | 3 | 178 |
| December | 3 | 3 | 3 | 184 |

NOTE.—Discharge interpolated for days for which there is no gage reading.

## POWERS CANAL NEAR BISHOP, CAL.

This station was established August 19, 1903. It was located one-half mile above a mill on Bishop Creek, and 4½ miles west of Bishop. The canal is straight for 20 feet above and 50 feet below the station. The bed of the canal is composed of gravel and is not subject to change.

Discharge measurements were made by wading.

The gage was a rod on the left bank of the canal.

*Discharge measurements of Powers canal near Bishop, Cal., in 1903-1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| Aug. 10 | R. S. Hawley | ........ | 6.2 | Apr. 3 | J. S. Evans | 1.10 | 0.7 |
| 19 | .....do | 1.50 | 6.8 | June 21 | .....do | 1.90 | 17.0 |
| 25 | .....do | 1.48 | 6.8 | July 27 | .....do | 1.68 | 11.8 |
| Sept. 3 | .....do | 1.33 | 2.8 | Aug. 10 | .....do | 1.30 | 1.4 |
| 9 | .....do | 1.41 | 4.9 | Sept. 7 | .....do | 1.40 | 2.8 |
| 15 | .....do | 1.38 | 3.5 | Nov. 23 | F. R. S. Buttemer | 1.25 | 1.1 |
| 21 | .....do | 1.36 | 3.6 | Dec. 11 | .....do | 1.58 | 3.2 |
| | | | | 21 | .....do | 1.16 | 1.0 |
| 1904. | | | | | | | |
| Apr. 16 | R. S. Hawley | 1.40 | 4.4 | | | | |
| May 17 | .....do | 1.50 | 6.1 | | | | |
| July 12 | Clausen and Barnes | 1.75 | 16.6 | | | | |
| Aug. 6 | L. M. Barnes | 1.75 | 15.8 | | | | |
| Oct. 24 | R. J. Taylor | 1.40 | 3.9 | | | | |

*Daily gage height, in feet, of Powers canal near Bishop, Cal., for 1904.*

| Day. | Mar. | Apr. | May. | June. | July. | Aug. | Day. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.3 | 1.4 | | | | | 16 | | 1.4 | | 1.7 | | |
| 2 | | | | 1.5 | | | 17 | | | 1.5 | 1.8 | | |
| 3 | | | 1.4 | | | | 18 | | 1.4 | | | 1.7 | 1.85 |
| 4 | | | | 1.5 | | | 19 | 1.3 | | 1.5 | 1.8 | | |
| 5 | | | 1.4 | | | 1.8 | 20 | | | | | | |
| 6 | | | | | | | 21 | | | | 1.8 | | |
| 7 | | | 1.5 | | | | 22 | | | 1.5 | | 1.7 | |
| 8 | | 1.4 | | | 1.8 | | 23 | | | | 1.8 | | |
| 9 | | | 1.5 | | | | 24 | | | | | | |
| 10 | | | | | | | 25 | | 1.4 | 1.5 | 1.8 | | |
| 11 | | | 1.5 | | 1.8 | | 26 | | | | | | 1.85 |
| 12 | | | | 1.6 | | | 27 | | | 1.5 | 1.75 | 1.7 | |
| 13 | | | 1.5 | | | | 28 | | | | | | |
| 14 | 1.3 | | | 1.6 | | | 29 | | | | 1.8 | | |
| 15 | | | | | 1.8 | | 30 | | | | | | |
| | | | | | | | 31 | 1.3 | | | | | |

NOTE.—No record January, February, September, October, November, December.

*Rating table for Powers canal near Bishop, Cal., from January 1 to December 31, 1904.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.20 | 0 | 1.50 | 7 | 1.70 | 14 | 1.90 | 23 |
| 1.30 | 2 | 1.60 | 10 | 1.80 | 18 | 2.00 | 29 |
| 1.40 | 4 | | | | | | |

*Monthly discharge of Powers canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| March | | | 2 | 123 |
| April | | | 4 | 238 |
| May | 7 | 4 | 6.4 | 394 |
| June | 18 | 7 | 12.8 | 762 |
| July | 18 | 14 | 16 | 984 |
| August | 20 | 18 | 19 | 1,168 |
| The period | | | | 3,669 |

## SOUTH HILLSIDE CANAL NEAR BISHOP, CAL.

This station was established August 26, 1903. It was located just below the west gate at the head of the canal 5 miles west of Bishop.

Discharge measurements were made by wading.

The gage was a rod on the left bank of the canal.

*Discharge measurements of South Hillside canal near Bishop, Cal., in 1903–1905.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| **1903.** | | *Feet.* | *Sec.-ft.* |
| Aug. 26 | R. S. Hawley | 1.8 | 3.9 |
| Sept. 3 | .....do | 1.8 | 4.2 |
| 9 | .....do | 1.8 | 4.2 |
| **1904.** | | | |
| Feb. 20 | R. S. Hawley | 1.60 | 1.0 |
| Apr. 25 | .....do | 2.00 | 7.0 |
| June 8 | .....do | 2.20 | 10.0 |
| Aug. 27 | L. M. Barnes | 1.90 | 5.1 |
| Sept. 7 | R. S. Hawley | 2.15 | 10.5 |
| Oct. 15 | Hawley, Clapp, and Taylor | 1.65 | 1.0 |
| Nov. 9 | R. J. Taylor | 1.63 | 1.1 |
| Dec. 5 | .....do | 1.50 | .4 |
| **1905.** | | *Feet.* | *Sec.-feet.* |
| Jan. 21 | R. J. Taylor | 1.60 | 1.0 |
| Feb. 8 | .....do | 1.60 | 1.0 |
| Mar. 4 | .....do | 1.66 | 1.9 |
| Apr. 18 | J. S. Evans | 1.70 | 3.0 |
| May 5 | .....do | 2.00 | 8.5 |
| July 27 | .....do | 1.98 | 7.9 |
| Aug. 10 | .....do | 2.00 | 8.9 |
| Sept. 22 | .....do | 2.00 | 8.8 |
| Oct. 25 | F. R. S. Buttemer | 1.75 | 3.5 |
| Nov. 23 | .....do | 1.58 | .9 |
| Dec. 11 | .....do | 1.50 | .3 |

*Daily gage height, in feet, of South Hillside canal near Bishop, Cal., for 1904.*

| Day. | Jan. | Feb. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | 1.5 | | |
| 3 | | | 2.0 | | | |
| 4 | | | | 1.5 | | |
| 5 | | | 2.0 | | | 2.1 |
| 6 | | | | | | |
| 7 | | | 2.0 | | | |
| 8 | | | | | | |
| 9 | | | 2.0 | | | |
| 10 | | | | | | |
| 11 | | | 2.0 | | 1.9 | |
| 12 | | | | 1.6 | | |
| 13 | | | 2.0 | | | |
| 14 | | | | 1.6 | | |
| 15 | | | | | 1.9 | |
| 16 | | | | 1.7 | | |
| 17 | | | 2.0 | 1.8 | | |
| 18 | | | | | 1.9 | 2.0 |
| 19 | | | 2.0 | 1.8 | | |
| 20 | | 1.6 | | | 2.0 | |
| 21 | | | | 1.8 | | |
| 22 | | | 2.0 | | | |
| 23 | 1.65 | | | 1.8 | | |
| 24 | | | | | | |
| 25 | | | 2.0 | 1.8 | | |
| 26 | | | | | | 2.0 |
| 27 | | | 2.0 | 1.75 | 2.0 | |
| 28 | | | | | | |
| 29 | | | | 1.8 | | |
| 30 | | | | | | |
| 31 | | | | | | |

NOTE.—Water turned out of canal Mar. 12 to Apr. 22, 1904.

*Rating table for South Hillside canal near Bishop, Cal., from January 1 to December 31, 1904.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.50 | 0 | 1.70 | 2.5 | 1.90 | 5.5 | 2.10 | 8.5 |
| 1.60 | 1 | 1.80 | 4 | 2.00 | 7 | 2.20 | 10 |

*Monthly discharge of South Hillside canal near Bishop, Cal., for 1904.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| April 24-30 | 7 | 7 | 7 | 97 |
| May | 7 | 7 | 7 | 430 |
| June | 4 | 0 | 2 | 119 |
| July | 7 | 4 | 5.7 | 350 |
| August | 9 | 7 | 8 | 492 |
| The period | | | | 1,488 |

NOTE.—Discharge interpolated for days on which gage was not read.

## NORTH HILLSIDE CANAL NEAR BISHOP, CAL.

This station was established September 3, 1903. It was located at the head gate of the canal, 5 miles west of Bishop.

Discharge measurements were made from a crosspiece of the flume.

The gage was a vertical rod fastened to the right side of flume or head gate.

*Discharge measurements of North Hillside canal near Bishop, Cal., in 1903-1905.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* |
| 1903. | | | |
| Aug. 19 | R. S. Hawley | | 10.6 |
| 25 | ....do | | 9.5 |
| Sept. 3 | ....do | 1.99 | 11.2 |
| 9 | ....do | 1.96 | 11.1 |
| Oct. 26 | ....do | 1.77 | 4.3 |
| 1904. | | | |
| Apr. 16 | R. S. Hawley | 1.76 | 4.6 |
| 25 | ....do | 1.96 | 10.3 |
| May 17 | ....do | 2.00 | 13.0 |
| June 20 | ....do | | 13.5 |
| July 12 | Clausen and Barnes | 2.00 | 13.8 |
| Aug. 8 | L. M. Barnes | 2.00 | 15.6 |
| Sept. 7 | R. S. Hawley | 1.90 | 9.3 |
| Oct. 15 | Hawley, Clapp, and Taylor. | 1.70 | 4.4 |
| 1904. | | | |
| Nov. 9 | R. J. Taylor | 1.70 | 3.8 |
| Dec. 5 | ....do | 1.55 | 1.7 |
| 1905. | | | |
| Mar. 4 | R. J. Taylor | 1.51 | 1.5 |
| Apr. 18 | J. S. Evans | 1.70 | 4.9 |
| May 5 | ....do | 2.00 | 12.0 |
| June 21 | ....do | 2.10 | 23.0 |
| July 27 | ....do | 2.05 | 18.8 |
| Aug. 10 | ....do | 2.08 | 19.4 |
| Sept. 17 | ....do | 1.98 | 11.8 |
| 22 | ....do | 2.00 | 13.0 |
| Oct. 23 | ....do | 1.70 | 3.9 |
| Nov. 23 | ....do | 1.70 | 2.9 |
| Dec. 11 | ....do | 1.52 | .7 |
| 21 | F. R. S. Buttemer | 1.45 | .6 |

*Daily gage height, in feet, of North Hillside canal near Bishop, Cal., for 1904.*

| Day. | Apr. | May. | June. | July. | Aug. | Day. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | 16 | 1.76 | | 2.02 | | |
| 2 | | | 2.05 | | | 17 | | 2.05 | | | |
| 3 | | 2.05 | | | | 18 | | | | 2.1 | 2.2 |
| 4 | | | 2.05 | | | 19 | | 2.05 | 2.0 | | |
| 5 | | 2.06 | | | 2.2 | 20 | | | | | |
| 6 | | | | | | 21 | | | 1.95 | | |
| 7 | | 2.06 | | | | 22 | | 2.04 | | 2.1 | |
| 8 | | | | 1.9 | 2.0 | 23 | 1.95 | | 1.9 | | |
| 9 | | 2.05 | | | | 24 | | 2.05 | | | |
| 10 | | | | | | 25 | 1.95 | | 1.9 | | |
| 11 | | 2.05 | | 1.9 | | 26 | | | | | 2.2 |
| 12 | | | 2.02 | | | 27 | | 2.05 | 1.9 | 2.1 | |
| 13 | | 2.05 | | | | 28 | | | | | |
| 14 | | | | | | 29 | | | 1.9 | | |
| 15 | | | | 2.0 | | 30 | | 2.03 | | | |
| | | | | | | 31 | | | | | |

NOTE.—Canal dry from Jan. 1, to Apr. 15, 1904.

*Rating table for North [illegible] canal near Bishop, Cal., from April [illegible] to December 31, 19[illegible].*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |

*Monthly discharge of North [illegible] canal near Bishop, Cal., for 19[illegible].*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| April | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] |
| The period | | | | [illegible] |

NOTE.—Discharge interpolated [illegible] days for which no gage height is given.

## BAKER CREEK NEAR BIG PINE, CAL.

This station, which was located at a point about 150 feet below the bridge on Millpond road and about 3 miles west of the town of Big Pine, was established February 20, 1908.

No observations of gage heights were made except during 1909.

The staff gage is at the footbridge, from which the following discharge measurements were made:

*Discharge measurements of Baker Creek near Big Pine, Cal., in 1907–1910.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1907. | | *Feet.* | *Sec.-ft.* | 1909. | | *Feet.* | *Sec.-ft.* |
| Apr. 9 | G. R. Shuey | ...... | 16 | Feb. 25 | R. E. Haines | 0.10 | [illegible] |
| May 2 | ....do | ...... | 29 | Mar. 16 | ....do | .14 | [illegible] |
| 25 | ....do | ...... | 41 | Apr. 16 | ....do | .16 | [illegible] |
| June 10 | ....do | ...... | 37 | 27 | ....do | .40 | [illegible] |
| July 8 | ....do | ...... | 24 | May 20 | ....do | .70 | [illegible] |
| Dec. 9 | R. B. Post | ...... | 14 | June 9 | ....do | .45 | [illegible] |
| | | | | July 2 | ....do | .65 | [illegible] |
| 1908. | | | | 20 | ....do | .35 | [illegible] |
| Feb. 20 | R. B. Post | 0.3 | 11 | Aug. 13 | ....do | .23 | [illegible] |
| Mar. 19 | ....do | .41 | 14 | Sept. 3 | ....do | .15 | [illegible] |
| May 14 | ....do | .52 | 19 | 24 | ....do | .10 | [illegible] |
| June 10 | ....do | .00 | 10 | Oct. 15 | ....do | .03 | [illegible] |
| July 17 | W. A. Lamb | −.10 | 5.3 | Nov. 5 | ....do | .12 | [illegible] |
| Aug. 1 | ....do | .00 | 8.6 | 26 | ....do | .12 | [illegible] |
| 13 | ....do | −.17 | 5.5 | | | | |
| 27 | ....do | −.02 | 7.5 | 1910. | | | |
| Sept. 15 | ....do | −.02 | 8.2 | Mar. 10 | R. E. Haines | .05 | [illegible] |
| Oct. 6 | ....do | −.05 | 6.5 | Apr. 1 | ....do | .00 | [illegible] |
| 23 | A. T. Barrows | .30 | 15 | 22 | ....do | .60 | [illegible] |
| Nov. 8 | ....do | −.10 | 7.2 | May 12 | ....do | .00 | [illegible] |
| 24 | Barrows and Lee | −.05 | 8.1 | June 25[a] | C. H. Lee | .... | [illegible] |
| | | | | Aug. 3[a] | Lee and Wood | .... | [illegible] |
| 1909. | | | | | | | |
| Jan. 23 | Haines and Lee | .08 | 9.3 | | | | |
| Feb. 9 | R. E. Haines | .12 | 9.8 | | | | |

[a] Made at road crossing above diversion.

*Daily gage height, in feet, of Baker Creek near Big Pine, Cal., for 1909.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0 | 0.1 | 0.1 | 0.15 | 0.55 | 0.7 | 0.5 | 0.15 | 0.15 |
| 2 | .0 | .1 | .1 | .2 | .60 | .8 | .5 | .15 | .15 |
| 3 | .0 | .1 | .15 | .2 | .95 | .85 | .5 | .15 | .15 |
| 4 | .0 | .1 | .15 | .2 | 1.05 | .8 | .6 | .25 | .1 |
| 5 | .0 | .1 | .2 | .2 | 1.10 | .65 | .5 | .25 | .25 |
| 6 | .0 | .1 | .2 | .2 | 1.20 | .5 | .5 | .25 | .25 |
| 7 | .15 | .1 | .1 | .2 | 1.25 | .55 | .45 | .25 | .25 |
| 8 | .1 | .1 | .1 | .2 | 1.25 | .5 | .35 | .25 | .15 |
| 9 | .1 | .1 | .1 | .25 | 1.20 | .5 | .3 | .25 | .15 |
| 10 | .1 | .1 | .1 | .2 | .75 | .5 | .3 | .25 | .1 |
| 11 | .0 | .15 | .1 | .2 | .55 | .5 | .3 | .25 | .05 |
| 12 | .0 | .1 | .1 | .25 | .45 | .5 | .3 | .25 | .0 |
| 13 | .0 | .1 | .1 | .25 | .40 | .5 | .35 | .25 | .1 |
| 14 | .15 | .1 | .1 | .3 | .55 | .5 | .4 | .2 | .05 |
| 15 | .1 | .1 | .1 | .25 | .55 | .5 | .4 | .2 | .1 |
| 16 | .1 | .1 | .1 | .3 | .65 | .45 | .4 | .2 | .1 |
| 17 | .1 | .1 | .1 | .45 | .85 | .4 | .4 | .15 | .1 |
| 18 | .1 | .1 | .1 | .5 | .8 | .5 | .4 | .1 | .1 |
| 19 | .1 | .1 | .1 | .4 | .8 | .35 | .4 | .1 | .1 |
| 20 | .1 | .1 | .1 | .35 | .95 | .35 | .4 | .1 | .1 |
| 21 | .25 | .1 | .1 | .3 | .9 | .35 | .4 | .1 | .1 |
| 22 | .2 | .1 | .1 | .25 | .75 | .35 | .4 | .1 | .1 |
| 23 | .1 | .1 | .1 | .25 | .55 | .35 | .4 | .15 | .1 |
| 24 | .1 | .1 | .1 | .3 | .65 | .35 | .35 | .15 | .1 |
| 25 | .1 | .1 | .1 | .35 | .8 | .40 | .35 | .15 | .1 |
| 26 | .1 | .1 | .1 | .45 | .85 | .50 | .35 | .15 | .1 |
| 27 | .1 | .1 | .1 | .45 | .8 | .50 | .25 | .15 | .1 |
| 28 | .1 | .1 | .1 | .45 | .45 | .45 | .25 | .15 | .1 |
| 29 | .1 | ........ | .1 | .55 | .5 | .50 | .25 | .2 | .1 |
| 30 | .1 | ........ | .1 | .55 | .7 | .50 | .45 | .25 | .1 |
| 31 | .1 | ........ | .1 | ........ | .8 | ........ | .15 | .25 | ........ |

*Daily discharge, in second-feet, of Baker Creek near Big Pine, Cal., for 1909.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 9 | 10 | 10 | 11 | 23 | 29 | 21 | 11 | 11 |
| 2 | 9 | 10 | 10 | 12 | 25 | 35 | 21 | 11 | 11 |
| 3 | 9 | 10 | 11 | 12 | 43 | 37 | 21 | 11 | 11 |
| 4 | 9 | 10 | 11 | 12 | 50 | 35 | 21 | 13 | 10 |
| 5 | 9 | 10 | 12 | 12 | 53 | 27 | 21 | 13 | 13 |
| 6 | 9 | 10 | 12 | 12 | 60 | 21 | 21 | 13 | 13 |
| 7 | 11 | 10 | 10 | 12 | 63 | 23 | 19 | 13 | 13 |
| 8 | 10 | 10 | 10 | 12 | 63 | 21 | 16 | 13 | 11 |
| 9 | 10 | 10 | 10 | 13 | 60 | 21 | 14 | 13 | 11 |
| 10 | 10 | 10 | 10 | 12 | 32 | 21 | 14 | 13 | 10 |
| 11 | 9 | 11 | 10 | 12 | 23 | 21 | 14 | 13 | 10 |
| 12 | 9 | 10 | 10 | 13 | 19 | 21 | 14 | 13 | 9 |
| 13 | 9 | 10 | 10 | 13 | 17 | 21 | 16 | 13 | 10 |
| 14 | 11 | 10 | 10 | 14 | 23 | 21 | 17 | 12 | 10 |
| 15 | 10 | 10 | 10 | 13 | 23 | 21 | 17 | 12 | 10 |
| 16 | 10 | 10 | 10 | 14 | 27 | 19 | 17 | 12 | 10 |
| 17 | 10 | 10 | 10 | 19 | 37 | 17 | 17 | 11 | 10 |
| 18 | 10 | 10 | 10 | 21 | 35 | 21 | 17 | 10 | 10 |
| 19 | 10 | 10 | 10 | 17 | 35 | 16 | 17 | 10 | 10 |
| 20 | 10 | 10 | 10 | 16 | 43 | 16 | 17 | 10 | 10 |
| 21 | 13 | 10 | 10 | 14 | 40 | 16 | 17 | 10 | 10 |
| 22 | 12 | 10 | 10 | 13 | 32 | 16 | 17 | 10 | 10 |
| 23 | 10 | 10 | 10 | 13 | 23 | 16 | 17 | 11 | 10 |
| 24 | 10 | 10 | 10 | 14 | 27 | 16 | 16 | 11 | 10 |
| 25 | 10 | 10 | 10 | 16 | 35 | 17 | 16 | 11 | 10 |
| 26 | 10 | 10 | 10 | 19 | 37 | 21 | 16 | 11 | 10 |
| 27 | 10 | 10 | 10 | 19 | 35 | 21 | 13 | 11 | 10 |
| 28 | 10 | 10 | 10 | 19 | 19 | 19 | 13 | 11 | 10 |
| 29 | 10 | 10 | 10 | 23 | 21 | 21 | 13 | 12 | 10 |
| 30 | 10 | ........ | 10 | 23 | 29 | 21 | 11 | 13 | 10 |
| 31 | 10 | ........ | 10 | ........ | 35 | ........ | 11 | 13 | ........ |

NOTE.—Daily discharge determined from a rating curve fairly well defined below a discharge of 30 second-feet.

*Monthly discharge of Baker Creek near Big Pine, Cal., for 1909.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| January | 13 | 9 | 9.94 | 611 | C. |
| February | 11 | 10 | 10.0 | 555 | C. |
| March | 12 | 10 | 10.2 | 627 | C. |
| April | 23 | 11 | 14.5 | 863 | B. |
| May | 63 | 17 | 35.1 | 2,160 | B. |
| June | 37 | 16 | 21.6 | 1,290 | C. |
| July | 25 | 11 | 16.6 | 1,020 | B. |
| August | 13 | 10 | 11.7 | 719 | C. |
| September | 13 | 9 | 10.4 | 619 | C. |
| The period | | | | 8,460 | |

## BIG PINE CREEK NEAR BIG PINE, CAL.

This station, which was located at a footbridge about 2 miles southwest of Big Pine, in sec. 26, T. 9 S., R. 33 E., was originally established December 5, 1903, at a point about 3 miles southwest of Big Pine, where the creek issues from the foothills, and was moved to the later site about half a mile farther east on October 29, 1907. No record of gage heights was kept from January 1, 1906, to May 22, 1908.

Water is diverted both above and below the station for irrigation. The drainage area above the mouth of the canyon is about 27 square miles.

The gage was a vertical staff on the right bank.

Discharge measurements were made from the footbridge near the gage.

The channel, which is composed of gravel and bowlders, is somewhat shifting.

Station was discontinued February 27, 1911.

*Discharge measurements of Big Pine Creek near Big Pine, Cal., in 1903–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| Aug. 14 | R. S. Hawley | | 112 | Aug. 17 | J. S. Evans | 2.60 | 88 |
| Oct. 12 | do | | 16.4 | Sept. 13 | do | 2.30 | 41 |
| Dec. 5 | do | 1.8 | 8.5 | Nov. 16 | F. R. S. Buttemer | 1.85 | 10.6 |
| | | | | Dec. 1 | do | 2.00 | 14.3 |
| 1904. | | | | 16 | do | 2.20 | 10.5 |
| Jan. 28 | R. S. Hawley | 1.80 | 11.1 | 16 | do | 2.20 | 12.2 |
| Feb. 10 | do | 1.82 | 16.5 | | | | |
| Apr. 22 | do | 2.00 | 22.0 | 1906. | | | |
| June 4 | Hawley and Clausen | 2.96 | 105 | Jan. 2 | F. R. S. Buttemer | 2.25 | 11 |
| Sept. 10 | R. S. Hawley | 2.45 | 58 | 17 | do | 2.32 | 13 |
| Oct. 10 | Hawley and Taylor | 2.00 | 31 | 24 | do | 1.98 | 13 |
| Nov. 18 | R. J. Taylor | 1.90 | 21 | Aug. 24 | Hawley and Shuey | (a) | 112 |
| Dec. 9 | do | 1.90 | 20 | Nov. 1 | G. R. Shuey | | 24 |
| | | | | Dec. 6 | do | | 20 |
| 1905. | | | | 16 | do | | 20 |
| Jan. 18 | R. J. Taylor | 1.95 | 25 | | | | |
| Feb. 18 | do | 1.85 | 23 | 1907. | | | |
| Apr. 26 | J. S. Evans | 2.20 | 30 | Jan. 27 | G. R. Shuey | | 18 |
| May 19 | do | 2.38 | 51 | Feb. 18 | do | | 20 |
| June 9 | do | 2.48 | 61 | Mar. 7 | do | | 20 |
| July 16 | do | 2.85 | 120 | 28 | do | | 21 |

[a] Gage out.

*Discharge measurements of Big Pine Creek near Big Pine, Cal., in 1903–1911*—Cont'd.

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| **1907.** | | *Feet.* | *Sec.-ft.* |
| Apr. 8 | G. R. Shuey | ........ | 23 |
| 21 | .....do | ........ | 51 |
| May 2 | .....do | ........ | 47 |
| 17 | .....do | ........ | 54 |
| June 11 | .....do | ........ | 83 |
| July 6 | .....do | ........ | 202 |
| 27 | .....do | ........ | 208 |
| Aug. 16 | R. B. Post | ........ | 120 |
| 26 | .....do | ........ | 98 |
| Sept. 8 | .....do | ........ | 65 |
| 24 | .....do | ........ | 31 |
| Oct. 29 | .....do | ........ | 30 |
| Nov. 15 | .....do | ........ | 24 |
| Dec. 9 | .....do | ........ | 20 |
| **1908.** | | | |
| Feb. 19 | R. B. Post | 2.65 | 20 |
| Mar. 18 | .....do | 2.75 | 23 |
| May 11 | .....do | 2.80 | 23 |
| 22 | .....do | 2.76 | 22 |
| June 10 | .....do | 3.07 | 47 |
| 17 | .....do | 3.16 | 47 |
| July 7 | .....do | 3.79 | 116 |
| 14 | Post and Lamb | 3.70 | 113 |
| Aug. 1 | W. A. Lamb | 4.10 | 166 |
| 13 | .....do | 3.72 | 112 |
| 27 | .....do | 3.33 | 67 |
| Sept. 15 | .....do | 3.05 | 46 |
| Oct. 6 | .....do | 2.70 | 21 |
| 24 | Lamb and Barrows | 2.51 | 13 |
| Nov. 8 | A. T. Barrows | 2.48 | 12 |
| 24 | Barrows and Lee | 2.48 | 12 |
| **1909.** | | *Feet.* | *Sec.-ft.* |
| Jan. 23 | Haines and Lee | 2.70 | 22.3 |
| Feb. 9 | R. E. Haines | 2.76 | 21.3 |
| 25 | .....do | 2.54 | 16.8 |
| Mar. 16 | .....do | 2.52 | 16.0 |
| Apr. 6 | .....do | 2.55 | 16.2 |
| 27 | .....do | 3.12 | 49.8 |
| May 20 | .....do | 3.14 | 47.3 |
| June 8 | .....do | 3.8 | 118.0 |
| July 2 | .....do | 4.6 | 241.0 |
| 20[a] | .....do | 3.84 | 127.0 |
| Aug. 13[a] | .....do | 3.59 | 93.1 |
| Sept. 3[a] | .....do | 3.44 | 73.3 |
| 24[a] | .....do | 3.1 | 40.7 |
| Oct. 15 | .....do | 2.75 | 22.6 |
| Nov. 5 | .....do | 2.67 | 19.0 |
| 26 | .....do | 2.59 | 16.8 |
| **1910.** | | | |
| Mar. 10 | R. E. Haines | 2.72 | 20 |
| Apr. 1 | .....do | 2.67 | 18 |
| 22 | .....do | 2.98 | 33 |
| May 12 | .....do | 3.23 | 50 |
| June 23 | C. H. Lee | 3.42 | 69 |
| July 13 | .....do | 3.82 | 106 |
| Aug. 1 | Wood and Lee | 3.77 | 100 |
| 22 | F. G. Wood | 3.50 | 73 |
| Sept. 16 | G. T. Peekema | 3.03 | 41 |
| Oct. 21 | .....do | 2.80 | 25 |
| Nov. 19 | .....do | 2.63 | 16 |
| Dec. 22 | .....do | 2.50 | 12 |
| **1911.** | | | |
| Jan. 24 | G. T. Peekema | 2.60 | 16 |

[a] Made from temporary footbridge.

*Daily gage height, in feet, of Big Pine Creek near Big Pine, Cal., for 1904–5, 1908–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1904.** | | | | | | | | | |
| 1 | 1.8 | 1.8 | 1.9 | 1.9 | 1.9 | 2.9 | 3.1 | 3.0 | 2.5 |
| 2 | 1.8 | 1.8 | 1.9 | 1.9 | 1.9 | 3.0 | 3.1 | 2.8 | 2.6 |
| 3 | 1.8 | 1.8 | 1.9 | 1.9 | 1.9 | 3.1 | 3.0 | 2.8 | 2.6 |
| 4 | 1.8 | 1.8 | 1.9 | 1.9 | 2.0 | 3.0 | 3.0 | 2.8 | 2.5 |
| 5 | 1.8 | 1.8 | 1.9 | 1.9 | 2.0 | 3.0 | 3.0 | 2.8 | 2.4 |
| 6 | 1.8 | 1.8 | 1.9 | 1.9 | 2.1 | 3.2 | 3.0 | 3.0 | 2.4 |
| 7 | 1.8 | 1.85 | 1.9 | 1.9 | 2.45 | 3.1 | 3.2 | 3.0 | 2.5 |
| 8 | 1.8 | 1.8 | 1.9 | 1.95 | 2.7 | 3.0 | 3.2 | 3.1 | 2.6 |
| 9 | 1.8 | 1.8 | 1.9 | 1.95 | 2.7 | 3.0 | 3.0 | 3.5 | 2.5 |
| 10 | 1.8 | 1.8 | 1.8 | 1.95 | 2.7 | 3.1 | 2.9 | 3.2 | 2.5 |
| 11 | 1.8 | 1.8 | 1.9 | 2.0 | 2.7 | 3.2 | 2.9 | 3.0 | 2.5 |
| 12 | 1.8 | 1.8 | 1.95 | 2.0 | 2.8 | 3.5 | 2.9 | 2.9 | 2.5 |
| 13 | 1.8 | 1.8 | 1.9 | 2.05 | 2.8 | 3.5 | 2.9 | 2.9 | 2.5 |
| 14 | 1.8 | 1.8 | 1.9 | 2.1 | 2.8 | 3.5 | 2.9 | 2.9 | 2.5 |
| 15 | 1.8 | 1.8 | 1.9 | 2.0 | 2.8 | 3.8 | 2.8 | 2.9 | 2.4 |
| 16 | 1.8 | 2.0 | 1.9 | 2.05 | 2.9 | 3.8 | 2.8 | 2.9 | 2.4 |
| 17 | 1.8 | 1.85 | 1.9 | 2.0 | 2.8 | 3.7 | 2.8 | 3.2 | 2.4 |
| 18 | 1.8 | 1.8 | 1.9 | 2.0 | 2.9 | 3.5 | 2.8 | 3.0 | 2.4 |
| 19 | 1.8 | 1.8 | 1.9 | 2.0 | 2.8 | 3.5 | 3.1 | 3.0 | 2.3 |
| 20 | 1.8 | 1.8 | 1.85 | 2.0 | 2.7 | 3.5 | 3.3 | 2.8 | 2.2 |
| 21 | 1.8 | 1.8 | 1.9 | 2.0 | 2.6 | 3.1 | 3.2 | 2.8 | 2.2 |
| 22 | 1.8 | 1.85 | 1.9 | 2.0 | 2.6 | 3.0 | 3.4 | 2.8 | 2.2 |
| 23 | 1.8 | 1.85 | 1.85 | 2.0 | 2.7 | 3.1 | 3.5 | 2.7 | 2.1 |
| 24 | 1.8 | 1.85 | 1.95 | 2.0 | 2.9 | 3.2 | 3.5 | 2.7 | 2.3 |
| 25 | 1.8 | 1.85 | 2.0 | 2.0 | 3.0 | 3.1 | 3.2 | 2.7 | 2.2 |
| 26 | 1.8 | 1.85 | 1.9 | 2.0 | 3.0 | 3.1 | 4.0 | 2.6 | 2.0 |
| 27 | 1.8 | 1.85 | 2.0 | 2.0 | 2.8 | 3.1 | 3.5 | 2.6 | 2.0 |
| 28 | 1.8 | 1.85 | 2.0 | 2.0 | 2.8 | 3.1 | 3.1 | 2.6 | 2.0 |
| 29 | 1.8 | 1.8 | 2.0 | 1.9 | 2.9 | 3.1 | 3.0 | 2.6 | 2.0 |
| 30 | 1.8 | ........ | 2.0 | 2.0 | 2.9 | 3.1 | 3.0 | 2.6 | 2.0 |
| 31 | 1.8 | ........ | 1.9 | ........ | 2.9 | ........ | 3.0 | 2.5 | ........ |

*Daily gage height, in feet, of Big Pine Creek near Big Pine, Cal., for 1904–5, 1905–1911—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | 1905–6. | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.65 | 2.65 | 2.4 | 2.5 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.6 | 2.6 | 2.5 | 2.5 | 2.55 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20 | | | | | |
| [illegible] | | | | | [illegible] | 21 | 2.65 | 2.55 | 2.45 | 2.55 | 2.55 |
| [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | 22 | | | | | |
| [illegible] | | | | | | 23 | 2.65 | 2.5 | 2.5 | 2.6 | 2.6 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | | | | | |
| [illegible] | | | | | | 25 | 2.6 | 2.5 | 2.5 | 2.6 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 26 | | | | | |
| [illegible] | | | | | | 27 | 2.7 | 2.5 | 2.5 | 2.6 | 2.65 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | | | | | |
| [illegible] | | | | | | 29 | 2.75 | 2.5 | 2.5 | 2.75 | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | | | | | |
| | | | | | | 31 | | | 2.55 | 2.6 | |

*Rating tables for Big Pine Creek near Big Pine, Cal.*

**January 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.80 | 90 | 3.30 | 136 |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.90 | 100 | 3.40 | 145 |
| [illegible] | [illegible] | [illegible] | [illegible] | 3.00 | 108 | 3.50 | 154 |
| [illegible] | [illegible] | [illegible] | [illegible] | 3.10 | 115 | | |
| [illegible] | [illegible] | [illegible] | [illegible] | 3.20 | 127 | | |

**March 31 to December 15, 1905.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | 2.80 | 115 | 3.30 | 220 |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.90 | 134 | 3.40 | 244 |
| [illegible] | [illegible] | [illegible] | [illegible] | 3.00 | 154 | 3.50 | 268 |
| [illegible] | [illegible] | [illegible] | [illegible] | 3.10 | 175 | | |
| [illegible] | [illegible] | [illegible] | [illegible] | 3.20 | 196 | | |

[illegible] discharge measurements made during 1905. It is fairly well defined [illegible] feet.

**January 1 to December 31, 1906.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | 3.60 | 97 | 4.20 | 181 |
| [illegible] | [illegible] | [illegible] | [illegible] | 3.70 | 110 | 4.30 | 196 |
| [illegible] | [illegible] | [illegible] | [illegible] | 3.80 | 123 | 4.40 | 211 |
| [illegible] | [illegible] | [illegible] | [illegible] | 3.90 | 137 | | |
| [illegible] | [illegible] | [illegible] | [illegible] | 4.00 | 151 | | |
| [illegible] | [illegible] | [illegible] | [illegible] | 4.10 | 166 | | |

[illegible] open-channel conditions. It is based on discharge measurements [illegible] 1906 and is well defined between gage heights 2.4 feet and [illegible]

*Daily discharge, in second-feet, of Big Pine Creek near Big Pine, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1909.** | | | | | | | | | |
| 1 | 14 | 17 | 14 | 14 | 40 | 63 | 175 | 96 | 94 |
| 2 | 14 | 17 | 14 | 14 | 43 | 73 | 240 | 94 | 83 |
| 3 | 14 | 17 | 14 | 14 | 45 | 83 | 131 | 100 | 78 |
| 4 | 14 | 17 | 14 | 14 | 49 | 100 | 131 | 106 | 73 |
| 5 | 14 | 17 | 14 | 14 | 53 | 118 | 131 | 112 | 70 |
| 6 | 14 | 18 | 14 | 16 | 58 | 127 | 131 | 118 | 66 |
| 7 | 14 | 20 | 14 | 17 | 63 | 136 | 131 | 114 | 63 |
| 8 | 15 | 21 | 14 | 17 | 66 | 145 | 131 | 110 | 58 |
| 9 | 16 | 23 | 14 | 17 | 70 | 168 | 131 | 106 | 53 |
| 10 | 17 | 21 | 14 | 19 | 73 | 191 | 151 | 100 | 49 |
| 11 | 17 | 21 | 13 | 20 | 73 | 207 | 171 | 94 | 45 |
| 12 | 17 | 21 | 12 | 21 | 73 | 223 | 191 | 88 | 43 |
| 13 | 17 | 21 | 12 | 21 | 68 | 238 | 207 | 83 | 40 |
| 14 | 17 | 21 | 12 | 21 | 63 | 234 | 223 | 76 | 37 |
| 15 | 17 | 21 | 12 | 21 | 57 | 240 | 194 | 69 | 34 |
| 16 | 17 | 23 | 14 | 21 | 51 | 249 | 175 | 63 | 30 |
| 17 | 17 | 25 | 14 | 22 | 45 | 258 | 160 | 91 | 25 |
| 18 | 17 | 25 | 14 | 24 | 49 | 258 | 146 | 118 | 21 |
| 19 | 17 | 25 | 14 | 25 | 53 | 258 | 131 | 145 | 29 |
| 20 | 17 | 23 | 14 | 25 | 49 | 252 | 124 | 126 | 37 |
| 21 | 19 | 20 | 14 | 25 | 58 | 246 | 145 | 106 | 45 |
| 22 | 21 | 17 | 14 | 25 | 50 | 240 | 160 | 100 | 45 |
| 23 | 21 | 15 | 14 | 25 | 48 | 240 | 175 | 94 | 45 |
| 24 | 21 | 14 | 14 | 25 | 45 | 240 | 175 | 100 | 45 |
| 25 | 21 | 16 | 14 | 26 | 45 | 224 | 175 | 106 | 45 |
| 26 | 21 | 14 | 14 | 25 | 45 | 207 | 175 | 110 | 42 |
| 27 | 21 | 14 | 14 | 45 | 45 | 187 | 168 | 114 | 40 |
| 28 | 19 | 14 | 14 | 30 | 45 | 166 | 160 | 118 | 37 |
| 29 | 17 | ...... | 14 | 34 | 50 | 145 | 133 | 114 | 37 |
| 30 | 17 | ...... | 14 | 37 | 54 | 160 | 106 | 110 | 37 |
| 31 | 17 | ...... | 14 | ...... | 58 | ...... | 102 | 106 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 1 | 37 | 22 | 17 | 35 | 20 | 16 | 20 | 49 | 115 | 91 | 94 | 55 |
| 2 | 37 | 21 | 17 | 35 | 20 | 16 | 20 | 42 | 134 | 94 | 94 | 53 |
| 3 | 37 | 21 | 17 | 35 | 20 | 16 | 20 | 42 | 154 | 84 | 94 | 51 |
| 4 | 37 | 21 | 17 | 35 | 18 | 18 | 20 | 42 | 131 | 75 | 99 | 49 |
| 5 | 37 | 21 | 17 | 35 | 16 | 20 | 20 | 42 | 107 | 66 | 104 | 46 |
| 6 | 37 | 21 | 17 | 35 | 16 | 20 | 20 | 42 | 84 | 75 | 99 | 42 |
| 7 | 37 | 21 | 17 | 35 | 16 | 20 | 20 | 42 | 84 | 84 | 94 | 42 |
| 8 | 37 | 21 | 17 | 35 | 16 | 20 | 20 | 42 | 84 | 94 | 94 | 42 |
| 9 | 37 | 21 | 17 | 35 | 16 | 20 | 20 | 46 | 94 | 104 | 94 | 42 |
| 10 | 34 | 19 | 17 | 35 | 16 | 20 | 21 | 49 | 104 | 104 | 94 | 42 |
| 11 | 32 | 17 | 17 | 35 | 16 | 20 | 23 | 49 | 112 | 104 | 89 | 42 |
| 12 | 30 | 17 | 17 | 35 | 17 | 20 | 24 | 49 | 120 | 104 | 84 | 42 |
| 13 | 30 | 17 | 17 | 30 | 19 | 20 | 24 | 49 | 127 | 110 | 88 | 40 |
| 14 | 30 | 17 | 17 | 25 | 20 | 20 | 24 | 49 | 110 | 115 | 75 | 38 |
| 15 | 30 | 17 | 17 | 20 | 20 | 20 | 24 | 49 | 94 | 104 | 75 | 38 |
| 16 | 30 | 17 | 17 | 20 | 20 | 20 | 24 | 49 | 80 | 94 | 75 | 38 |
| 17 | 30 | 17 | 17 | 20 | 20 | 20 | 26 | 66 | 66 | 147 | 75 | 34 |
| 18 | 30 | 17 | 17 | 20 | 20 | 20 | 27 | 66 | 66 | 199 | 66 | 29 |
| 19 | 30 | 17 | 17 | 20 | 20 | 20 | 29 | 66 | 66 | 252 | 57 | 26 |
| 20 | 34 | 17 | 17 | 20 | 20 | 20 | 29 | 66 | 66 | 184 | 70 | 24 |
| 21 | 37 | 17 | 17 | 18 | 20 | 20 | 29 | 66 | 66 | 115 | 84 | 26 |
| 22 | 37 | 17 | 17 | 16 | 20 | 20 | 32 | 96 | 75 | 110 | 84 | 29 |
| 23 | 37 | 17 | 17 | 17 | 20 | 20 | 35 | 127 | 84 | 104 | 84 | 30 |
| 24 | 33 | 17 | 17 | 19 | 18 | 20 | 40 | 127 | 84 | 120 | 84 | 32 |
| 25 | 29 | 17 | 17 | 20 | 16 | 20 | 44 | 127 | 84 | 138 | 84 | 34 |
| 26 | 25 | 17 | 17 | 20 | 16 | 20 | 49 | 127 | 75 | 154 | 80 | 35 |
| 27 | 25 | 17 | 17 | 20 | 16 | 20 | 49 | 127 | 66 | 134 | 75 | 32 |
| 28 | 25 | 17 | 17 | 20 | 16 | 20 | 49 | 127 | 75 | 115 | 70 | 29 |
| 29 | 24 | 17 | 17 | 20 | ...... | 20 | 53 | 127 | 84 | 110 | 66 | 29 |
| 30 | 23 | 17 | 17 | 20 | ...... | 20 | 57 | 127 | 87 | 104 | 62 | 29 |
| 31 | 22 | ...... | 17 | 20 | ...... | 20 | ...... | 121 | ...... | 99 | 57 | ...... |

*Daily discharge, in second-feet, of Big Pine Creek near Big Pine, Cal., for 1909–1911—* Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 29 | 20 | 13 | 14 | 32 | 16 | 28 | 19 | 11 | 13 | 15 |
| 2 | 29 | 18 | 14 | 14 | 28 | 17 | 26 | 18 | 10 | 13 | 16 |
| 3 | 29 | 16 | 16 | 13 | 26 | 18 | 25 | 17 | 11 | 13 | 15 |
| 4 | 29 | 17 | 14 | 13 | 30 | 19 | 24 | 16 | 12 | 13 | 14 |
| 5 | 29 | 18 | 13 | 13 | 24 | 20 | 25 | 15 | 12 | 14 | 14 |
| 6 | 29 | 17 | 13 | 12 | 22 | 21 | 26 | 14 | 11 | 14 | 14 |
| 7 | 29 | 16 | 12 | 12 | 20 | 22 | 26 | 14 | 12 | 15 | 15 |
| 8 | 29 | 16 | 13 | 12 | 19 | 23 | 26 | 13 | 13 | 16 | 16 |
| 9 | 29 | 16 | 13 | 12 | 18 | 24 | 25 | 13 | 13 | 16 | 16 |
| 10 | 28 | 17 | 13 | 12 | 17 | 25 | 24 | 13 | 13 | 16 | 16 |
| 11 | 26 | 18 | 13 | 12 | 16 | 26 | 22 | 13 | 13 | 16 | 17 |
| 12 | 28 | 17 | 12 | 12 | 16 | 27 | 20 | 13 | 12 | 16 | 18 |
| 13 | 29 | 16 | 11 | 12 | 16 | 28 | 21 | 13 | 13 | 18 | 18 |
| 14 | 29 | 18 | 12 | 13 | 15 | 29 | 22 | 13 | 13 | 22 | ........ |
| 15 | 29 | 20 | 13 | 13 | 14 | 30 | 21 | 13 | 14 | 40 | ........ |
| | | | | | | 31 | 28 | ........ | 14 | 25 | ........ |

NOTE.—Discharge determined from well-defined rating curves applicable as follows: Jan. 1 to Dec. 31, 1909, and Jan. 1, 1910 to Feb. 28, 1911. Discharge interpolated for days on which the gage was not read except Jan. 30 and Feb. 4, 1911, which were estimated.

*Monthly discharge of Big Pine Creek near Big Pine, Cal., 1904–5 and 1907–1911.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1904.** | | | | | |
| January | 12 | 11 | 11 | 676 | |
| February | 22 | 11 | 12 | 690 | |
| March | 22 | 11 | 16.8 | 1,033 | |
| April | 29 | 16 | 20.5 | 1,220 | |
| May | 109 | 16 | 72.7 | 4,469 | |
| June | 188 | 100 | 132 | 7,855 | |
| July | 208 | 90 | 119 | 7,317 | |
| August | 154 | 62 | 96.8 | 5,593 | |
| September | 71 | 22 | 49 | 2,916 | |
| The period | ........ | ........ | ........ | 31,800 | |
| **1904–5.** | | | | | |
| October | 36 | 16 | 24 | 1,476 | |
| November | 22 | 16 | 21 | 1,250 | |
| December | 22 | 11 | 15 | 922 | |
| January | 24 | 19 | 21.7 | 1,334 | |
| February | 30 | 22 | 23.9 | 1,327 | |
| March | 24 | 9 | 18.9 | 1,162 | |
| April | 66 | 9 | 17.9 | 1,065 | |
| May | 66 | 15 | 46.7 | 2,872 | |
| June | 244 | 52 | 118 | 7,021 | |
| July | 268 | 144 | 187 | 11,500 | |
| August | 154 | 97 | 122 | 7,501 | |
| September | 97 | 30 | 51.1 | 3,041 | |
| The year | 268 | 9 | 55.6 | 40,500 | |
| **1905.** | | | | | |
| October | 35 | 9 | 13.7 | 842 | |
| November | 10 | 9 | 9.6 | 571 | |
| December | 15 | 11 | 12.5 | 372 | |
| **1907.** | | | | | |
| January | ........ | ........ | 18 | 1,110 | D. |
| February | ........ | ........ | 20 | 1,110 | D. |
| March | ........ | ........ | 20 | 1,230 | D. |
| April | ........ | ........ | 38 | 2,260 | D. |
| May | ........ | ........ | 56 | 3,440 | D. |
| June | ........ | ........ | 110 | 6,540 | D. |
| July | ........ | ........ | 202 | 12,400 | D. |
| August | ........ | ........ | 118 | 7,260 | D. |
| September | ........ | ........ | 46 | 2,740 | D. |
| The period | ........ | ........ | ........ | 38,100 | |

*Monthly discharge of Big Pine Creek near Big Pine, Cal., 1904-5 and 1907-1911*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1907-8.** | | | | | |
| October | ........ | ........ | 30 | 1,840 | D. |
| November | ........ | ........ | 24 | 1,430 | D. |
| December | ........ | ........ | 20 | 1,230 | D. |
| January | ........ | ........ | 20 | 1,230 | D. |
| February | ........ | ........ | 20 | 1,150 | D. |
| March | ........ | ........ | 23 | 1,410 | D. |
| April | ........ | ........ | 25 | 1,490 | D. |
| May | 39 | 23 | 28 | 1,720 | C. |
| June | 64 | 21 | 39 | 2,320 | B. |
| July | 166 | 55 | 131 | 8,060 | B. |
| August | 166 | 55 | 100 | 6,150 | B. |
| September | 85 | 26 | 50 | 2,980 | B. |
| The year | ........ | ........ | 42.5 | 31,000 | |
| **1908-9.** | | | | | |
| October | 21 | 17 | 18.0 | 1,110 | B. |
| November | 17 | 10 | 13.0 | 774 | B. |
| December | 17 | 13 | 15.0 | 922 | B. |
| January | 21 | 14 | 17.1 | 1,050 | C. |
| February | 25 | 14 | 19.2 | 1,070 | C. |
| March | 14 | 12 | 13.7 | 842 | C. |
| April | 45 | 14 | 22.4 | 1,330 | C. |
| May | 73 | 40 | 54.2 | 3,330 | C. |
| June | 258 | 63 | 189 | 11,200 | B. |
| July | 240 | 102 | 157 | 9,650 | B. |
| August | 145 | 63 | 103 | 6,330 | B. |
| September | 94 | 21 | 48.2 | 2,870 | B. |
| The year | 258 | 10 | 55.9 | 40,500 | |
| **1909-10.** | | | | | |
| October | 37 | 22 | 31.9 | 1,960 | C. |
| November | 22 | 17 | 18.3 | 1,090 | C. |
| December | 17 | 17 | 17.0 | 1,060 | B. |
| January | 35 | 16 | 26.0 | 1,600 | B. |
| February | 20 | 16 | 18.1 | 1,010 | B. |
| March | 20 | 16 | 19.5 | 1,200 | B. |
| April | 57 | 20 | 29.7 | 1,770 | A. |
| May | 127 | 42 | 74.0 | 4,550 | A. |
| June | 154 | 66 | 92.6 | 5,510 | A. |
| July | 252 | 66 | 116.0 | 7,130 | B. |
| August | 104 | 57 | 82.1 | 5,050 | A. |
| September | 55 | 24 | 37.3 | 2,220 | B. |
| The year | 252 | 16 | 46.9 | 34,100 | |
| **1910-11.** | | | | | |
| October | 29 | 20 | 26.2 | 1,610 | B. |
| November | 20 | 13 | 15.9 | 946 | B. |
| December | 16 | 10 | 12.7 | 781 | B. |
| January | 40 | 12 | 15.5 | 953 | B. |
| February | 32 | 14 | 18.5 | 1,030 | B. |

NOTE.—Daily discharge interpolated between discharge measurements Jan. 1 to Mar. 20, 1905, and during 1907. Monthly means January-April, 1908, are estimated. Daily discharge interpolated for days on which the gage was not read during November-December, 1905.

## TINEMAHA CREEK NEAR BIG PINE, CAL.[1]

This station, which is located at a point near Peterson's ranch house, about 1 mile west of Fish Springs schoolhouse and 7 miles south of Big Pine, in sec. 21, T. 10 S., R. 34 E., was established December 7, 1906, and discontinued February 28, 1911.

[1] Formerly described as near Tinemaha.

[illegible]

[illegible] The [illegible]
[illegible] was [illegible]

[illegible]

[illegible]

| | | | | | | |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

*Daily gage height, in feet, of Tinemaha Creek near Big Pine, Cal., for 1906–1911.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | | | | | |
| 1 | ........ | 0.4 | 0.5 | 0.4 | 0.35 | 0.65 | 0.8 | 1.15 | 1.1 | 0.5 |
| 2 | ........ | .4 | .5 | .3 | .35 | .65 | .85 | 1.3 | 1.2 | .5 |
| 3 | ........ | .5 | .5 | .4 | .35 | .65 | .85 | 1.6 | 1.2 | .5 |
| 4 | ........ | .45 | .5 | .6 | .35 | .7 | .9 | 1.9 | 1.1 | .5 |
| 5 | ........ | .5 | .45 | .5 | .35 | .5 | .95 | 1.8 | 1.1 | .5 |
| 6 | ........ | .5 | .5 | .45 | .35 | .6 | .85 | 1.6 | 1.1 | .4 |
| 7 | 0.5 | .5 | .45 | .45 | .35 | .6 | .9 | 1.6 | 1.0 | .4 |
| 8 | .5 | .5 | .45 | .45 | .35 | .6 | .85 | 1.5 | 1.0 | .4 |
| 9 | .5 | .5 | .5 | .4 | .35 | .6 | .8 | 1.5 | 1.0 | .4 |
| 10 | .5 | .5 | .5 | .4 | .35 | .6 | .8 | 1.4 | .9 | .4 |
| 11 | .5 | .5 | .5 | .4 | .4 | .6 | .8 | 1.3 | .9 | .4 |
| 12 | .5 | .45 | .5 | .45 | .4 | .6 | .8 | 1.3 | .8 | .4 |
| 13 | .5 | .5 | .5 | .5 | .4 | .6 | .8 | 1.3 | .8 | .45 |
| 14 | .5 | .5 | .45 | .45 | .5 | .65 | .8 | 1.4 | .8 | .45 |
| 15 | .5 | .5 | .45 | .4 | .5 | .65 | .75 | 1.3 | .8 | .3 |
| 16 | .45 | .5 | .4 | .4 | .5 | .6 | .75 | 1.2 | .85 | .4 |
| 17 | .45 | .5 | .45 | .5 | .55 | .6 | .7 | 1.1 | .9 | .4 |
| 18 | .4 | .5 | .45 | .45 | .55 | .6 | .7 | 1.2 | 1.0 | .4 |
| 19 | .4 | .5 | .45 | .55 | .55 | .65 | .7 | 1.2 | 1.0 | .4 |
| 20 | .4 | .5 | .45 | .5 | .55 | .6 | .75 | 1.2 | .9 | .4 |
| 21 | .4 | .5 | .5 | .5 | .55 | .65 | .8 | 1.2 | .8 | .4 |
| 22 | .5 | .5 | .5 | .45 | .6 | .8 | .8 | 1.2 | .8 | .4 |
| 23 | .5 | .45 | .5 | .5 | .6 | .75 | .8 | 1.2 | .75 | .4 |
| 24 | .5 | .5 | .45 | .45 | .6 | .8 | .8 | 1.2 | .7 | .4 |
| 25 | .5 | .5 | .45 | .45 | .6 | .75 | .85 | 1.3 | .7 | .4 |
| 26 | .55 | .5 | .45 | .45 | .6 | .8 | .9 | 1.3 | .65 | .35 |
| 27 | .5 | .5 | .45 | .45 | .6 | .75 | 1.1 | 1.3 | .6 | .35 |
| 28 | .5 | .6 | .45 | .45 | .65 | .8 | 1.1 | 1.25 | .6 | .35 |
| 29 | .5 | .55 | ........ | .4 | .65 | .8 | 1.15 | 1.2 | .6 | .35 |
| 30 | .5 | .5 | ........ | .4 | .65 | .8 | 1.15 | 1.2 | .55 | .35 |
| 31 | .5 | .5 | ........ | .4 | ........ | .8 | ........ | 1.2 | .5 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 0.35 | 0.35 | 0.35 | 0.4 | 0.4 | 0.55 | 0.55 | 0.55 | 0.55 | 0.95 | 1.2 | 0.6 |
| 2 | .35 | .35 | .35 | .3 | .4 | .55 | .55 | .6 | .45 | .95 | 1.15 | .65 |
| 3 | .35 | .35 | .35 | .3 | .35 | .55 | .55 | .55 | .45 | .95 | 1.5 | .7 |
| 4 | .35 | .35 | .35 | .35 | .35 | .5 | .55 | .55 | .55 | 1.0 | 1.1 | .75 |
| 5 | .3 | .35 | .35 | .35 | .4 | .5 | .55 | .55 | .55 | 1.0 | 1.15 | .75 |
| 6 | .3 | .35 | .35 | .35 | .4 | .5 | .55 | .6 | .55 | 1.0 | 1.1 | .7 |
| 7 | .3 | .35 | .35 | .35 | .35 | .5 | .55 | .55 | .55 | 1.1 | 1.2 | .8 |
| 8 | .3 | .35 | .35 | .35 | .35 | .5 | .5 | .55 | .55 | 1.1 | 1.15 | .8 |
| 9 | .3 | .35 | .35 | .35 | .35 | .55 | .55 | .55 | .55 | 1.1 | 1.2 | .8 |
| 10 | .3 | .35 | .45 | .35 | .35 | .5 | .55 | .6 | .5 | 1.55 | 1.1 | .8 |
| 11 | .3 | .35 | .35 | .35 | .35 | .5 | .5 | .55 | .5 | 1.2 | 1.0 | .75 |
| 12 | .3 | .35 | .35 | .35 | .35 | .5 | .5 | .55 | .5 | 1.2 | 1.5 | .75 |
| 13 | .3 | .35 | .4 | .35 | .35 | .5 | .5 | .55 | .5 | 1.2 | .95 | .8 |
| 14 | .3 | .35 | .4 | .35 | .35 | .5 | .55 | .45 | .55 | 1.3 | .9 | .75 |
| 15 | .3 | .35 | .35 | .35 | .35 | .55 | .55 | .45 | .55 | 1.35 | .9 | .7 |
| 16 | .4 | .35 | .35 | .35 | .35 | .55 | .5 | .55 | .55 | 1.3 | .85 | .65 |
| 17 | .4 | .35 | .35 | .35 | .35 | .5 | .5 | .45 | .6 | 1.35 | .8 | .65 |
| 18 | .4 | .35 | .35 | .35 | .6 | .55 | .5 | .45 | .6 | 1.4 | .8 | .7 |
| 19 | .35 | .35 | .35 | .4 | .6 | .55 | .5 | .45 | .65 | 1.4 | .8 | .75 |
| 20 | .35 | .35 | .35 | .4 | .6 | .55 | .5 | .55 | .7 | 1.0 | .8 | .6 |
| 21 | .35 | .35 | .35 | .35 | .6 | .55 | .5 | .55 | .7 | 1.1 | .8 | .7 |
| 22 | .35 | .35 | .3 | .4 | .6 | .55 | .55 | .45 | .75 | 1.15 | .85 | .75 |
| 23 | .4 | .35 | .35 | .4 | .6 | .55 | .5 | .45 | .75 | 1.1 | .85 | .7 |
| 24 | .4 | .35 | .35 | .4 | .6 | .55 | .5 | .55 | .8 | 1.1 | .8 | .65 |
| 25 | .4 | .35 | .3 | .4 | .6 | .55 | .55 | .55 | .8 | 1.15 | .75 | .65 |
| 26 | .4 | .35 | .35 | .5 | .6 | .55 | .5 | .55 | .85 | 1.1 | .75 | .65 |
| 27 | .4 | .35 | .4 | .45 | .6 | .55 | .55 | .55 | .85 | 1.1 | .7 | .6 |
| 28 | .35 | .35 | .4 | .45 | .55 | .55 | .55 | .45 | .9 | 1.2 | .7 | .65 |
| 29 | .35 | .35 | .4 | .4 | .55 | .55 | .55 | .55 | 1.0 | 1.5 | .65 | .7 |
| 30 | .35 | .35 | .4 | .4 | ........ | .55 | .55 | .55 | .95 | 1.1 | .6 | .7 |
| 31 | .35 | ........ | .4 | .4 | ........ | .55 | ........ | .55 | ........ | 1.0 | .6 | ........ |

*Daily gage height, in feet, of [illegible] Creek near Big Pine, Cal., for 1906–1911—Contd.*

*Daily gage height, in feet, of Tinemaha Creek near Big Pine, Cal., for 1906–1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 0.8 | 0.7 | 0.7 | 0.85 | 0.9 | 16 | 0.8 | 0.7 | 0.65 | 0.7 | 0.7 |
| 2 | .8 | .7 | .7 | .8 | .85 | 17 | .75 | .7 | .65 | .7 | .8 |
| 3 | .75 | .7 | .7 | .78 | .8 | 18 | .7 | .7 | .65 | .7 | .8 |
| 4 | .8 | .7 | .75 | .8 | 1.0 | 19 | .7 | .7 | .65 | .71 | .8 |
| 5 | .8 | .65 | .75 | .8 | .85 | 20 | .7 | .7 | .65 | .7 | .8 |
| 6 | .75 | .7 | .7 | .8 | .82 | 21 | .7 | .7 | .65 | .7 | .8 |
| 7 | .8 | .65 | .7 | .8 | .8 | 22 | .75 | .7 | .65 | .7 | .8 |
| 8 | .75 | .7 | .7 | .8 | .8 | 23 | .7 | .7 | .65 | .68 | .8 |
| 9 | .8 | .7 | .7 | .8 | .78 | 24 | .7 | .7 | .65 | .71 | .8 |
| 10 | .75 | .7 | .7 | .85 | .78 | 25 | .7 | .7 | .8 | .7 | .8 |
| 11 | .7 | .7 | .7 | .8 | .78 | 26 | .75 | .7 | .75 | .68 | .8 |
| 12 | .8 | .7 | .7 | .8 | .78 | 27 | .7 | .7 | .8 | .68 | .75 |
| 13 | .8 | .7 | .7 | .8 | .78 | 28 | .7 | .7 | .8 | .85 | .8 |
| 14 | .7 | .7 | .65 | .75 | .78 | 29 | .7 | .7 | .85 | 1.2 | ........ |
| 15 | .85 | .7 | .65 | .7 | .72 | 30 | .75 | .7 | .9 | 1.21 | ........ |
| | | | | | | 31 | .7 | ........ | .85 | 1.0 | ........ |

NOTE.—Gage changed Feb. 18, 1908. Gage washed out June 28, 1909. New gage installed July 19, 1909.

*Daily discharge, in second-feet, of Tinemaha Creek near Big Pine, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 4.5 | 4.5 | 10 | 4.5 | 3.1 | 23 | 65 | 30 | 15 |
| 2 | 4.5 | 4.5 | 7.4 | 4.5 | 4.5 | 23 | 65 | 29 | 15 |
| 3 | 4.5 | 5.9 | 7.4 | 4.5 | 4.5 | 27 | 65 | 29 | 15 |
| 4 | 4.5 | 5.9 | 7.4 | 4.5 | 4.5 | 28 | 65 | 25 | 15 |
| 5 | 4.5 | 7.4 | 7.4 | 3.1 | 5.9 | 30 | 65 | 23 | 15 |
| 6 | 4.5 | 7.4 | 7.4 | 3.1 | 5.9 | 30 | 55 | 21 | 15 |
| 7 | 4.5 | 5.9 | 7.4 | 1.8 | 4.5 | 34 | 55 | 23 | 15 |
| 8 | 4.5 | 5.9 | 7.4 | 1.8 | 5.9 | 34 | 55 | 27 | 12 |
| 9 | 4.5 | 5.9 | 7.4 | 1.8 | 8.9 | 35 | 55 | 25 | 9.6 |
| 10 | 7.4 | 7.4 | 7.4 | 1.8 | 10 | 35 | 55 | 19 | 12 |
| 11 | 5.9 | 7.4 | 7.4 | 1.8 | 7.4 | 37 | 45 | 21 | 15 |
| 12 | 4.5 | 7.4 | 7.4 | 1.8 | 8.9 | 39 | 45 | 21 | 15 |
| 13 | 4.5 | 10 | 7.4 | 1.8 | 8.9 | 41 | 45 | 21 | 15 |
| 14 | 4.5 | 10 | 5.9 | 1.8 | 10 | 44 | 45 | 23 | 13 |
| 15 | 4.5 | 10 | 5.9 | 1.8 | 10 | 50 | 45 | 25 | 13 |
| 16 | 4.5 | 10 | 5.9 | 1.8 | 10 | 52 | 35 | 27 | 15 |
| 17 | 4.5 | 10 | 5.9 | 3.1 | 10 | 53 | 35 | 27 | 13 |
| 18 | 4.5 | 14 | 4.5 | 3.1 | 10 | 55 | 35 | 25 | 15 |
| 19 | 4.5 | 14 | 4.5 | 3.1 | 12 | 48 | 35 | 25 | 15 |
| 20 | 4.5 | 14 | 4.5 | 3.1 | 12 | 52 | 35 | 25 | 15 |
| 21 | 4.5 | 14 | 4.5 | 4.5 | 12 | 55 | 37 | 27 | 13 |
| 22 | 4.5 | 14 | 4.5 | 4.5 | 14 | 59 | 39 | 27 | 12 |
| 23 | 4.5 | 14 | 4.5 | 4.5 | 14 | 62 | 39 | 27 | 12 |
| 24 | 5.9 | 14 | 4.5 | 3.1 | 14 | 64 | 39 | 27 | 9.6 |
| 25 | 4.5 | 14 | 4.5 | 3.1 | 14 | 66 | 45 | 27 | 9.6 |
| 26 | 4.5 | 10 | 4.5 | 3.1 | 14 | 62 | 43 | 23 | 12 |
| 27 | 4.5 | 10 | 4.5 | 3.1 | 14 | 59 | 41 | 23 | 9.6 |
| 28 | 4.5 | 10 | 4.5 | 3.1 | 14 | 60 | 39 | 23 | 8.1 |
| 29 | 4.5 | ........ | 4.5 | 3.1 | 14 | 60 | 35 | 19 | 8.1 |
| 30 | 4.5 | ........ | 4.5 | 3.1 | 12 | 60 | 33 | 19 | 8.1 |
| 31 | 4.5 | ........ | 4.5 | 3.1 | 14 | ........ | 31 | 19 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 12 | 8.1 | 7.0 | 22.4 | 7.6 | 10.9 | 4.3 | 9.7 | 45 | 27.8 | 19.8 | 14.4 |
| 2 | 9.6 | 7.0 | 7.0 | 14.5 | 10.9 | 7.6 | 4.2 | 6.6 | 45 | 23.2 | 19.8 | 12.5 |
| 3 | 9.6 | 7.0 | 8.1 | 10.9 | 14.5 | 10.9 | 4.2 | 6.6 | 39.4 | 23.2 | 19.8 | 14.5 |
| 4 | 9.6 | 7.0 | 8.1 | 7.6 | 10.9 | 10.9 | 4.2 | 6.6 | 39.4 | 18.8 | 24.0 | 7.7 |
| 5 | 8.1 | 7.0 | 8.1 | 7.6 | 10.9 | 7.6 | 4.2 | 6.7 | 34.8 | 19.0 | 15.7 | 12.8 |
| 6 | 8.1 | 7.0 | 12 | 7.6 | 7.6 | 7.6 | 6.8 | 6.7 | 30.3 | 15.0 | 19.8 | 9.4 |
| 7 | 8.1 | 7.0 | 8.1 | 10.9 | 7.6 | 7.6 | 4.2 | 6.7 | 25.8 | 19.2 | 15.7 | 14.7 |
| 8 | 8.1 | 7.0 | 12 | 7.6 | 10.9 | 7.6 | 4.2 | 9.8 | 25.8 | 19.3 | 15.7 | 7.8 |
| 9 | 8.1 | 7.0 | 8.1 | 10.9 | 7.6 | 10.8 | 6.8 | 9.8 | 25.8 | 23.6 | 15.7 | 13.0 |
| 10 | 8.1 | 7.0 | 12 | 7.6 | 7.6 | 7.6 | 6.8 | 13.3 | 30.5 | 19.6 | 15.7 | 13.0 |

*Daily discharge, in second-feet, of Tinemaha Creek near Big Pine, Cal., for 1909–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 11 | 8.1 | 8.1 | 12 | 10.9 | 7.6 | 7.6 | 9.8 | 13.3 | 35.2 | 23.8 | 15.7 | 9.6 |
| 12 | 8.1 | 8.1 | 12 | 10.9 | 10.9 | 7.4 | 13.3 | 13.3 | 35.2 | 24.0 | 15.7 | 6.5 |
| 13 | 7.0 | 7.0 | 12 | 10.9 | 7.6 | 7.4 | 9.8 | 13.4 | 30.6 | 28.4 | 15.7 | 8.0 |
| 14 | 6.2 | 6.2 | 12 | 10.9 | 7.6 | 7.4 | 6.7 | 13.4 | 26.2 | 23.7 | 15.7 | 6.7 |
| 15 | 7.0 | 6.2 | 8.1 | 14.5 | 7.6 | 4.6 | 6.7 | 13.4 | 26.2 | 23.6 | 15.7 | 9.8 |
| 16 | 8.1 | 7.0 | 8.1 | 10.9 | 10.9 | 4.6 | 4.1 | 13.5 | 22.0 | 23.4 | 15.7 | 9.8 |
| 17 | 8.1 | 7.0 | 8.1 | 14.5 | 10.9 | 7.4 | 6.7 | 13.5 | 22.0 | 23.2 | 15.7 | 9.5 |
| 18 | 8.1 | 7.0 | 8.1 | 10.9 | 7.6 | 10.6 | 9.8 | 13.5 | 22.0 | 48.6 | 15.7 | 8.3 |
| 19 | 7.0 | 7.0 | 8.1 | 10.9 | 10.9 | 7.2 | 6.6 | 13.5 | 22.0 | 46.4 | 15.7 | 6.8 |
| 20 | 7.0 | 7.0 | 8.1 | 7.6 | 7.6 | 7.2 | 9.7 | 13.6 | 22.0 | 35.6 | 15.7 | 6.8 |
| 21 | 8.1 | 7.0 | 8.1 | 10.9 | 7.6 | 7.2 | 6.6 | 13.6 | 18.0 | 45.0 | 12.0 | 6.5 |
| 22 | 8.1 | 7.0 | 8.1 | 10.9 | 7.6 | 7.2 | 9.6 | 13.6 | 18.0 | 30.3 | 15.7 | 6.9 |
| 23 | 8.1 | 7.0 | 12 | 7.6 | 7.6 | 7.2 | 6.5 | 17.5 | 18.0 | 29.8 | 13.7 | 6.9 |
| 24 | 8.1 | 6.2 | 12 | 10.9 | 10.9 | 10.4 | 6.5 | 21.6 | 18.0 | 25.2 | 15.7 | 6.9 |
| 25 | 9.6 | 6.2 | 8.1 | 10.9 | 7.6 | 7.0 | 9.7 | 21.6 | 22.2 | 29.5 | 12.1 | 6.9 |
| 26 | 9.6 | 6.2 | 8.1 | 7.6 | 10.9 | 7.0 | 6.5 | 21.6 | 22.2 | 20.7 | 15.8 | 7.0 |
| 27 | 9.6 | 6.2 | 8.1 | 10.9 | 7.6 | 7.0 | 6.5 | 21.6 | 27.0 | 24.8 | 17.9 | 7.0 |
| 28 | 9.6 | 6.2 | 8.1 | 10.9 | 10.9 | 7.0 | 4.0 | 25.8 | 22.4 | 20.4 | 20.0 | 7.0 |
| 29 | 9.6 | 6.2 | 12 | 7.6 | ...... | 4.3 | 6.6 | 30.3 | 27.4 | 24.6 | 12.3 | 7.0 |
| 30 | 9.6 | 6.2 | 12 | 10.9 | ...... | 4.3 | 6.6 | 34.8 | 22.8 | 20.2 | 14.3 | 7.0 |
| 31 | 9.6 | ...... | 31 | 10.9 | ...... | 4.3 | ...... | 45 | ...... | 24.4 | 14.3 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 7.0 | 5.1 | 5.0 | 8.6 | 10 | 16 | 7.3 | 5.5 | 3.5 | 4.6 | 4.6 |
| 2 | 7.0 | 5.1 | 5.0 | 7.2 | 8.6 | 17 | 5.9 | 5.5 | 3.4 | 4.6 | 7.2 |
| 3 | 5.6 | 5.2 | 5.0 | 6.7 | 7.2 | 18 | 4.6 | 5.5 | 3.4 | 4.6 | 7.2 |
| 4 | 7.0 | 5.2 | 6.3 | 7.2 | 14 | 19 | 4.7 | 5.4 | 3.4 | 4.9 | 7.2 |
| 5 | 7.0 | 3.9 | 6.3 | 7.2 | 8.6 | 20 | 4.7 | 5.4 | 3.4 | 4.6 | 7.2 |
| 6 | 5.6 | 5.2 | 4.9 | 7.2 | 7.8 | 21 | 4.7 | 5.3 | 3.4 | 4.6 | 7.2 |
| 7 | 7.0 | 3.9 | 4.9 | 7.2 | 7.2 | 22 | 6.1 | 5.3 | 3.4 | 4.6 | 7.2 |
| 8 | 5.6 | 5.3 | 4.9 | 7.2 | 7.2 | 23 | 4.7 | 5.3 | 3.4 | 4.2 | 7.2 |
| 9 | 7.0 | 5.3 | 4.9 | 7.2 | 6.7 | 24 | 4.8 | 5.2 | 3.4 | 4.9 | 7.2 |
| 10 | 5.7 | 5.3 | 4.8 | 8.6 | 6.7 | 25 | 4.8 | 5.2 | 7.0 | 4.6 | 7.2 |
| 11 | 4.4 | 5.4 | 4.8 | 7.2 | 6.7 | 26 | 6.2 | 5.2 | 5.6 | 4.2 | 7.2 |
| 12 | 7.1 | 5.4 | 4.8 | 7.2 | 6.7 | 27 | 4.9 | 5.2 | 7.0 | 4.2 | 5.9 |
| 13 | 7.1 | 5.4 | 4.8 | 7.2 | 6.7 | 28 | 4.9 | 5.1 | 7.0 | 8.6 | 7.2 |
| 14 | 4.5 | 5.5 | 3.5 | 5.9 | 6.7 | 29 | 5.0 | 5.1 | 8.6 | 22 | ...... |
| 15 | 8.2 | 5.5 | 3.5 | 4.6 | 5.1 | 30 | 6.4 | 5.1 | 10.2 | 22 | ...... |
| | | | | | | 31 | 5.0 | ...... | 8.6 | 14 | ...... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to June 21, 1909, well defined below a discharge of 35 second-feet; June 22 to July 18, 1909, estimated by comparison with Birch Creek; July 19 to Dec. 31, 1909, well defined below a discharge of 35 second-feet; Jan. 1 to Dec. 31, 1910, indirect method for shifting channels; Jan. 1 to Feb. 28, 1911, fairly well defined.

*Monthly discharge of Tinemaha Creek near Big Pine, Cal., for 1907–1911.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1907. | | | | | |
| January | 8 | 3 | 4.9 | 301 | C. |
| February | 5 | 4 | 4.4 | 244 | C. |
| March | 8 | 2 | 4.0 | 246 | C. |
| April | 10 | 2.5 | 5.3 | 315 | C. |
| May | 16 | 5 | 11.0 | 676 | C. |
| June | 30 | 12 | 18.0 | 1,070 | C. |
| July | 66 | 29 | 39.0 | 2,400 | C. |
| August | 33 | 9 | 20.0 | 1,230 | C. |
| September | 7.8 | 5 | 6.1 | 363 | C. |
| The period | | | | 6,840 | |

*Monthly discharge of Tinemaha Creek near Big Pine, Cal., for 1907-1911*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet.) | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1907-8.** | | | | | |
| October | 6.5 | 4.5 | 5.4 | 332 | C. |
| November | 5.5 | 5.5 | 5.5 | 327 | C. |
| December | 7.8 | 4.5 | 5.7 | 350 | C. |
| January | 9.0 | 4.5 | 6.0 | 369 | C. |
| February | 6.5 | 4.8 | 5.8 | 334 | C. |
| March | 4.8 | 3.6 | 4.4 | 270 | C. |
| April | 4.8 | 3.6 | 4.3 | 256 | C. |
| May | 6.1 | 2.8 | 4.4 | 270 | C. |
| June | 24 | 2.8 | 8.5 | 506 | C. |
| July | 52 | 22 | 32 | 1,970 | C. |
| August | 49 | 6.1 | 21 | 1,290 | C. |
| September | 14 | 6.1 | 9.8 | 583 | C. |
| The year | 52 | 2.8 | 9.40 | 6,860 | |
| **1908-9.** | | | | | |
| October | 7.5 | 5. | 5.5 | 338 | C. |
| November | 5.5 | 4.5 | 5.0 | 298 | C. |
| December | 6 | 4.5 | 5.3 | 326 | C. |
| January | 7.4 | 4.5 | 4.68 | 288 | B. |
| February | 14 | 4.5 | 9.55 | 530 | A. |
| March | 10 | 4.5 | 5.98 | 368 | B. |
| April | 4.5 | 1.8 | 2.99 | 178 | C. |
| May | 14 | 3.1 | 9.90 | 609 | A. |
| June | 66 | 23 | 45.9 | 2,730 | B. |
| July | 65 | 31 | 45.8 | 2,820 | C. |
| August | 30 | 19 | 24.3 | 1,490 | A. |
| September | 15 | 8.1 | 12.8 | 762 | A. |
| The year | 66 | 1.8 | 14.8 | 10,700 | |
| **1909-10.** | | | | | |
| October | 12 | 6.2 | 8.49 | 522 | B. |
| November | 8.1 | 6.2 | 6.87 | 409 | B. |
| December | 31 | 7.0 | 10.2 | 627 | A. |
| January | 22.4 | 7.6 | 10.7 | 658 | C |
| February | 14.5 | 7.6 | 9.14 | 508 | C. |
| March | 10.9 | 4.3 | 7.53 | 463 | C. |
| April | 13.3 | 4.0 | 6.74 | 401 | C. |
| May | 45 | 6.6 | 15.6 | 959 | B. |
| June | 45 | 18 | 27.4 | 1,630 | B. |
| July | 48.6 | 15 | 25.9 | 1,590 | B. |
| August | 24.0 | 12 | 16.2 | 996 | B. |
| September | 14.7 | 6.5 | 9.04 | 538 | C. |
| The year | 48.6 | 4.0 | 12.8 | 9,300 | |
| **1910-11.** | | | | | |
| October | 8.2 | 4.4 | 5.82 | 358 | C. |
| November | 5.5 | 3.9 | 5.20 | 309 | C. |
| December | 10.2 | 3.4 | 5.10 | 314 | C. |
| January | 22 | 4.2 | 7.3 | 449 | C. |
| February | 14 | 4.6 | 7.3 | 405 | C. |

NOTE.—Discharge for 1907-8 determined from rating curves covering short period of time and by the indirect method for shifting channels.

## BIRCH CREEK NEAR BIG PINE, CAL.[1]

This station, which was located at a point near Peterson's ranch house, about 1 mile west of Fish Springs schoolhouse and about 7 miles south of Big Pine, in sec. 16, T. 10 S., R. 34 E., was established June 14, 1905, discontinued December 9, 1905, reestablished December 7, 1906, and again discontinued February 28, 1911.

No water is diverted above or near the station. The drainage area above the mouth of the canyon is approximately 7 square miles. The gage was a vertical staff on the left bank.

[1] Formerly described as near Tinemaha.

Discharge measurements were made from the footbridge at the gage.

The bed of the stream consists of coarse gravel and sand and shifts somewhat. Both banks are low but not subject to overflow. The current is swift at all stages.

*Discharge measurements of [illegible] near Big Pine, Cal., in 1905–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | Feet. | Sec.-ft. | 1905. | | Feet. | Sec.-ft. |
| [illegible] | [illegible] | [illegible] | [illegible] | Aug. 1 | W. A. Lamb | 0.25 | 6.2 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | | 7.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | Sept. [illegible] | do | .25 | 5.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | | 3.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] 2 | Barrows and Lamb | .19 | 2.9 |
| [illegible] | [illegible] | [illegible] | [illegible] | Nov. [illegible] | A. T. Barrows | .30 | 3.1 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .21 | 2.9 |
| [illegible] | [illegible] | [illegible] | [illegible] | 1906. | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | Jan. 9 | Hammer and Lee | [illegible] | 4.6 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | E. E. Hammer | .30 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .26 | 4.5 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .26 | 4.5 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .30 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .33 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .30 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .70 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .56 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .50 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .37 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .42 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .30 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | .35 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 1910. | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | E. E. Hammer | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 1911. | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

*[illegible] near Big Pine, [illegible] for 1911.*

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Birch Creek near Big Pine, Cal., for 1906–[illegible]*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | | | | | |
| 1 | ........ | [illegible] | 0.4 | 0.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | ........ | [illegible] | .4 | .35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | ........ | .75 | .4 | .35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | ........ | .4 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | ........ | .35 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | ........ | .35 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | 0.35 | .35 | .4 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | .35 | .35 | .45 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | .35 | .4 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | .4 | .4 | .4 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | .4 | .4 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | .4 | .4 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | .4 | .45 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | .4 | .4 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | .35 | .4 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | .3 | .45 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | .3 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | .45 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | .3 | .45 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | .3 | .45 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | .3 | .4 | .5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | .3 | .4 | .4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | .3 | .4 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | .3 | .4 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | .35 | .4 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | .45 | .4 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | .4 | .4 | .4 | .45 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | .4 | .4 | .4 | .35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | .35 | .45 | ........ | .35 | [illegible] | [illegible] | [illegible] | [illegible] | .4 | [illegible] |
| 30 | .35 | .45 | ........ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | .35 | .4 | ........ | [illegible] | ........ | [illegible] | ........ | [illegible] | .4 | ... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June. | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 0.25 | 0.25 | 0.2 | 0.25 | 0.25 | 0.3 | 0.25 | 0.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | .25 | .25 | .25 | .25 | .25 | [illegible] | .25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | .25 | .3 | .25 | .25 | .3 | .3 | .25 | [illegible] | [illegible] | [illegible] | [illegible] | .4 |
| 4 | .25 | .25 | .2 | .25 | .3 | .3 | .25 | [illegible] | [illegible] | [illegible] | [illegible] | .4 |
| 5 | .3 | .25 | .2 | .25 | .3 | [illegible] | .25 | [illegible] | .3 | [illegible] | [illegible] | .4 |
| 6 | .3 | .25 | .3 | .25 | .3 | .3 | .25 | .3 | .3 | [illegible] | [illegible] | .4 |
| 7 | .3 | .25 | .3 | .25 | .3 | .3 | .25 | .3 | .3 | [illegible] | [illegible] | .4 |
| 8 | .3 | .25 | .3 | .25 | .25 | .25 | .3 | .3 | .3 | [illegible] | [illegible] | .4 |
| 9 | .25 | .25 | .3 | .25 | .25 | .25 | .3 | .3 | .3 | [illegible] | [illegible] | .4 |
| 10 | .25 | .25 | .3 | .25 | .25 | .25 | .3 | .3 | .35 | .6 | [illegible] | .4 |
| 11 | .25 | .25 | .25 | .25 | .25 | .25 | .25 | .25 | .4 | [illegible] | [illegible] | .4 |
| 12 | .25 | .25 | .25 | .25 | .25 | .25 | .25 | .25 | .45 | [illegible] | [illegible] | .3 |
| 13 | .25 | .25 | .25 | .25 | .25 | .25 | .3 | .25 | .55 | [illegible] | [illegible] | .3 |
| 14 | .25 | .25 | .25 | .25 | .3 | .3 | .3 | .25 | .55 | [illegible] | [illegible] | .3 |
| 15 | .3 | .25 | .25 | .25 | .3 | .3 | .3 | .25 | .45 | [illegible] | [illegible] | .3 |
| 16 | .4 | .25 | .25 | .25 | .3 | .3 | .3 | .25 | .45 | .5 | .45 | .3 |
| 17 | .4 | .25 | .25 | .25 | .25 | .3 | .3 | .25 | .45 | .5 | .45 | .3 |
| 18 | .25 | .25 | .2 | .25 | .25 | .3 | .3 | .25 | .4 | .5 | .45 | .3 |
| 19 | .3 | .25 | .2 | .25 | .25 | .3 | .25 | .25 | .4 | .5 | .45 | .3 |
| 20 | .3 | .25 | .2 | .25 | .25 | .3 | .3 | .25 | .4 | .5 | .45 | .25 |
| 21 | .3 | .25 | .25 | .25 | .25 | .3 | .3 | .25 | .45 | .5 | .4 | .25 |
| 22 | .25 | .25 | .25 | .25 | .25 | .3 | .3 | .25 | .4 | .5 | .4 | .25 |
| 23 | .4 | .25 | .2 | .3 | .25 | .3 | .3 | .25 | .5 | .5 | .4 | .25 |
| 24 | .3 | .25 | .25 | .3 | .25 | .3 | .3 | .25 | .5 | .6 | .4 | .25 |
| 25 | .3 | .2 | .2 | .25 | .25 | .3 | .25 | .25 | .55 | .6 | .4 | .25 |
| 26 | .3 | .2 | .25 | .25 | .3 | .3 | .3 | .3 | .55 | .5 | .35 | .3 |
| 27 | .25 | .2 | .25 | .3 | .3 | .25 | .35 | .3 | .55 | .6 | .35 | .3 |
| 28 | .25 | .2 | .25 | .3 | .3 | .25 | .35 | .35 | .55 | .6 | .3 | .3 |
| 29 | .25 | .2 | .25 | .3 | .3 | .25 | .35 | .35 | .55 | .6 | .3 | .3 |
| 30 | .25 | .2 | .25 | .3 | ....... | .25 | .3 | .4 | .55 | .5 | .3 | .3 |
| 31 | .25 | ....... | .25 | .3 | ....... | .25 | ....... | .35 | ....... | .5 | .35 | ..... |

[illegible]—Continued

*Daily gage height, in feet, of Birch Creek near Big Pine, Cal., for 19[illegible]–191[illegible]—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19[illegible]–1[illegible]. | | | | | | 1910–11. | | | | | |
| 1 | 0.[illegible] | 0.4 | 0.5 | 0.32 | 0 | 16 | 0.4 | 0.[illegible] | 0.[illegible] | 0.3[illegible] | 0.4[illegible] |
| 2 | [illegible] | [illegible] | [illegible] | .31 | [illegible] | 17 | [illegible] | [illegible] | [illegible] | .3[illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 18 | [illegible] | [illegible] | .3[illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | .4 | [illegible] | .4[illegible] | 19 | [illegible] | [illegible] | | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | .4 | [illegible] | [illegible] | 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22 | [illegible] | [illegible] | [illegible] | .3[illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | .3[illegible] | 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] | .3[illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | .4 | [illegible] | 25 | [illegible] | [illegible] | 4 | .3[illegible] | [illegible] |
| 11 | [illegible] | [illegible] | .35 | .3[illegible] | [illegible] | 26 | [illegible] | [illegible] | .3[illegible] | .3[illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | .32 | [illegible] | 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | .32 | [illegible] | 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | .35 | [illegible] | 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | .45 | [illegible] | .3 | .35 | [illegible] | 30 | [illegible] | [illegible] | .3 | [illegible] | [illegible] |
| | | | | | | 31 | [illegible] | ...... | [illegible] | [illegible] | [illegible] |

*Daily discharge, in second-feet, of Birch Creek near Big Pine, Cal., for 190[illegible]–191[illegible].*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 19[illegible]. | | | | | | | | | |
| 1 | [illegible] | 5.0 | 5.0 | 8.8 | 8.8 | 2[illegible] | 62 | 11 | 8.8 |
| 2 | [illegible] | 5.0 | [illegible] | 8.8 | [illegible] | 27 | 69 | 11 | 8.8 |
| 3 | [illegible] | 5.0 | [illegible] | 8.8 | 8.8 | 40 | 77 | 1[illegible] | 6.8 |
| 4 | [illegible] | 5.0 | [illegible] | 8.8 | [illegible] | 54 | 69 | 1[illegible] | 6.8 |
| 5 | [illegible] | 5.0 | 3.3 | 8.8 | 8.8 | 47 | 62 | 1[illegible] | 6.8 |
| 6 | [illegible] | 5.0 | [illegible] | 8.8 | 11 | 30 | 54 | 11 | 6.8 |
| 7 | [illegible] | 5.0 | [illegible] | 6.8 | 1[illegible] | 27 | 40 | 13 | 5.0 |
| 8 | [illegible] | 6.8 | [illegible] | 6.8 | 11 | 27 | 35 | 13 | 5.0 |
| 9 | [illegible] | 6.8 | [illegible] | 6.8 | 11 | 27 | 3[illegible] | 13 | 6.8 |
| 10 | 11 | 6.8 | [illegible] | 6.8 | 11 | 2[illegible] | 23 | 13 | 6.8 |
| 11 | [illegible] | 6.8 | 3.3 | 6.8 | 1[illegible] | 33 | 36 | 13 | 6.8 |
| 12 | [illegible] | 6.8 | [illegible] | 6.8 | 11 | 3[illegible] | 40 | 13 | 6.8 |
| 13 | 5.0 | 6.8 | [illegible] | 6.8 | 11 | 3[illegible] | 45 | 1[illegible] | 6.8 |
| 14 | [illegible] | 6.8 | [illegible] | 6.8 | 1[illegible] | 2[illegible] | 47 | 1[illegible] | 6.8 |
| 15 | 3.3 | 6.8 | 3.3 | 6.8 | 11 | 25 | 40 | 13 | 6.8 |
| 16 | 3.3 | 6.8 | 3.3 | 6.8 | 11 | 3[illegible] | 40 | 13 | 6.8 |
| 17 | 3.3 | 6.8 | [illegible] | 8.8 | 11 | 3[illegible] | 36 | 13 | 6.8 |
| 18 | 3.3 | 6.8 | 5.[illegible] | 8.8 | 11 | 3[illegible] | 3[illegible] | 13 | 6.8 |
| 19 | 3.3 | 6.8 | 5.0 | 8.8 | 1[illegible] | 2[illegible] | 2[illegible] | 1[illegible] | 6.8 |
| 20 | 6.8 | 6.8 | 5.0 | 8.8 | 11 | 27 | 3[illegible] | 13 | 6.8 |
| 21 | 6.8 | 6.8 | 5.0 | 6.8 | 11 | 3[illegible] | 40 | 16 | 6.8 |
| 22 | 6.8 | 6.8 | 5.0 | 6.8 | 11 | 3[illegible] | 40 | 16 | 6.8 |
| 23 | 6.8 | 6.8 | 5.0 | 6.8 | 11 | 3[illegible] | 40 | 16 | 6.8 |
| 24 | 6.8 | 6.8 | 5.0 | 6.8 | 11 | 47 | 40 | 16 | 6.8 |
| 25 | 6.8 | 6.8 | 5.0 | 6.8 | 16 | 62 | 40 | 16 | 6.8 |
| 26 | 5.0 | 6.8 | 5.0 | 6.8 | 16 | 54 | 40 | 13 | 6.8 |
| 27 | 5.0 | 6.8 | 5.0 | 6.8 | 16 | 47 | 36 | 13 | 6.8 |
| 28 | 3.3 | 6.8 | 6.8 | 8.8 | 18 | 50 | 33 | 11 | 6.8 |
| 29 | 3.3 | ...... | 6.8 | 8.8 | 18 | 5[illegible] | 27 | 11 | 6.8 |
| 30 | 3.3 | ...... | 8.8 | 8.8 | 18 | 54 | 27 | 11 | 6.8 |
| 31 | 3.3 | ...... | 8.8 | ...... | 21 | ...... | 16 | 11 | ...... |

*Daily discharge, in second-feet, of Birch Creek near Big Pine, Cal., for 1909–1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1. | 4.6 | 2.0 | 4.6 | 33 | 9.5 | 9.5 | 6 | 9.5 | 25 | 32 | 19 | 9 |
| 2. | 4.6 | 2.0 | 4.6 | 36 | 9.5 | 6 | 6 | 9.5 | 25 | 34 | 19 | 9.5 |
| 3. | 4.6 | 1.0 | 33 | 36 | 14 | 9.5 | 6 | 9.5 | 25 | 32 | 19 | 9.5 |
| 4. | 4.6 | 1.0 | 33 | 9.5 | 9.5 | 9.5 | 6 | 9.5 | 36 | 14 | 19 | 5.2 |
| 5. | 4.6 | 2.0 | 33 | 9.5 | 9.5 | 9.5 | 6 | 6 | 32 | 34 | 19 | 7 |
| 6. | 4.6 | 2.0 | 23 | 9.5 | 14 | 6 | 9.5 | 9.5 | 32 | 14 | 18 | 5.9 |
| 7. | 4.6 | 2.0 | 23 | 36 | 9.5 | 6 | 6 | 9.5 | 32 | 32 | 15 | 7.5 |
| 8. | 4.6 | 1.0 | 22 | 9.5 | 6 | 6 | 6 | 9.5 | 32 | 14 | 15 | 4.9 |
| 9. | 4.6 | 1.0 | 22 | 9.5 | 6 | 9.5 | 9.5 | 9.5 | 32 | 32 | 15 | 6.3 |
| 10. | 5.0 | 3.0 | 23 | 6 | 6 | 6 | 9.5 | 9.5 | 35 | 14 | 15 | 4.2 |
| 11. | 5.0 | 5.0 | 23 | 9.5 | 6 | 6 | 14 | 9.5 | 32 | 30 | 17 | 3.5 |
| 12. | 5.0 | 4.6 | 27 | 9.5 | 9.5 | 6 | 14 | 9.5 | 32 | 32 | 17 | 3.5 |
| 13. | 5.0 | 4.6 | 23 | 9.5 | 9.5 | 6 | 9.5 | 14 | 30 | 36 | 17 | 5.2 |
| 14. | 5.0 | 4.6 | 22 | 14 | 6 | 9.5 | 9.5 | 14 | 32 | 32 | 14 | 3.5 |
| 15. | 5.0 | 4.6 | 21 | 14 | 6 | 6 | 6 | 14 | 32 | 32 | 14 | 7 |
| 16. | 5.0 | 4.6 | 22 | 14 | 9.5 | 6 | 6 | 14 | 32 | 32 | 14 | 7 |
| 17. | 5.0 | 4.6 | 12 | 14 | 9.5 | 9.5 | 9.5 | 9.5 | 30 | 32 | 14 | 7 |
| 18. | 5.0 | 4.6 | 11 | 14 | 6 | 9.5 | 6 | 9.5 | 32 | 32 | 5 | 3.5 |
| 19. | 5.0 | 4.6 | 11 | 9.5 | 9.5 | 6 | 9.5 | 9.5 | 32 | 34 | 23 | 3.5 |
| 20. | 5.0 | 4.6 | 11 | 9.5 | 6 | 6 | 9.5 | 9.5 | 32 | 35 | 23 | 3.5 |
| 21. | 2.3 | 4.6 | 11 | 14 | 6 | 6 | 14 | 9.5 | 14 | 47 | 13 | 3.5 |
| 22. | 2.3 | 4.6 | 11 | 9.5 | 6 | 6 | 9.5 | 14 | 14 | 30 | 13 | 3 |
| 23. | 2.3 | 4.6 | 11 | 14 | 6 | 9.5 | 9.5 | 14 | 14 | 36 | 13 | 3.5 |
| 24. | 1.0 | 4.6 | 11 | 9.5 | 6 | 9.5 | 9.5 | 14 | 14 | 30 | 21 | 3.5 |
| 25. | 1.0 | 4.6 | 11 | 9.5 | 9.5 | 6 | 9.5 | 14 | 36 | 36 | 14 | 3.5 |
| 26. | 1.0 | 4.6 | 11 | 6 | 9.5 | 6 | 6 | 14 | 14 | 30 | 12 | .5 |
| 27. | 1.0 | 4.6 | 11 | 9.5 | 6 | 6 | 9.5 | 14 | 39 | 36 | 12 | 3.5 |
| 28. | 1.0 | 4.6 | 11 | 9.5 | 9.5 | 6 | 6 | 30 | 31 | 30 | 15 | .6 |
| 29. | 1.0 | 4.6 | 11 | 6 | ...... | 9.5 | 9.5 | 36 | 36 | 36 | 15 | 2.5 |
| 30. | 1.0 | 4.6 | 14 | 9.5 | ...... | 6 | 9.5 | 33 | 36 | 32 | 9.5 | 2.5 |
| 31. | 1.0 | ...... | 47 | 9.5 | ...... | 6 | ...... | 40 | ...... | 32 | 9.5 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1. | 2.5 | 7.0 | 2.5 | 4.2 | 24 | 16. | 7.0 | 2.5 | 2.5 | 5.2 | 9.5 |
| 2. | 2.5 | 2.5 | 2.5 | 1.9 | 15 | 17. | 2.5 | 2.5 | 2.5 | 4.2 | 7.0 |
| 3. | 2.5 | 2.5 | 2.5 | 2.5 | 7.0 | 18. | 2.5 | 2.5 | 5.2 | 2.5 | 2.5 |
| 4. | 2.5 | 2.5 | 7.0 | 2.5 | 7.5 | 19. | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 5. | 2.5 | 2.5 | 7.0 | 2.5 | 7.0 | 20. | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 6. | 2.5 | 2.5 | 2.5 | 2.5 | 7.0 | 21. | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 7. | 2.5 | 2.5 | 2.5 | 2.5 | 5.2 | 22. | 2.5 | 2.5 | 2.5 | 4.2 | 2.5 |
| 8. | 2.5 | 2.5 | 2.5 | 2.5 | 4.2 | 23. | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 9. | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 24. | 2.5 | 2.5 | 2.5 | 5.2 | 2.5 |
| 10. | 2.5 | 2.5 | 2.5 | 7.0 | 2.5 | 25. | 2.5 | 2.5 | 7.0 | 6.3 | 2.5 |
| 11. | 2.5 | 2.5 | 5.2 | 5.2 | 2.5 | 26. | 2.5 | 2.5 | 5.2 | 5.2 | 2.5 |
| 12. | 2.5 | 2.5 | 2.5 | 4.2 | 2.5 | 27. | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 13. | 2.5 | 2.5 | 2.5 | 4.2 | 2.5 | 28. | 2.5 | 2.5 | 2.5 | 5.2 | 2.5 |
| 14. | 2.5 | 2.5 | 2.5 | 5.2 | 2.5 | 29. | 2.5 | 2.5 | 2.5 | 15 | ...... |
| 15. | 9.5 | 2.5 | 2.5 | 5.2 | 7.0 | 30. | 2.5 | 2.5 | 5.2 | 52 | ...... |
| | | | | | | 31. | 2.5 | ...... | 2.5 | 28 | ...... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to Dec. 31, 1909, well defined below 40 second-feet. Jan. 1 to Aug. 1, 1910, well defined below 45 second-feet; Aug. 2–21, 1911, [illegible] method for shifting channels used; Aug. 22, 1910, to Feb. 28, 1911, fairly well defined between 2 and 17 second-feet. Oct. 24 to Nov. 9, 1909, was estimated from measurement made during the period.

*Monthly discharge of Birch Creek near Big Pine, Cal., 1907–1911.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1907.** | | | | | |
| January | 26 | 5.2 | 7.6 | 467 | C. |
| February | 8.9 | 6 | 6.2 | 344 | C. |
| March | 11 | 4.6 | 8.2 | 504 | C. |
| April | 11 | 5.2 | 8.0 | 476 | C. |
| May | 20 | 8.9 | 12.5 | 769 | C. |
| June | 42 | 11 | 20.0 | 1,190 | C. |
| July | 50 | 26 | 32.0 | 1,970 | C. |
| August | 38 | 6 | 19.3 | 1,190 | C. |
| September | 6 | 4.3 | 5.0 | 298 | C. |
| The period | .......... | .......... | .......... | 7,210 | |
| **1907-8.** | | | | | |
| October | 6 | 4.3 | 4.6 | 283 | C. |
| November | 4.6 | 4.2 | 4.3 | 256 | C. |
| December | 4.6 | 4.2 | 4.3 | 264 | C. |
| January | 7.1 | 4.8 | 5.2 | 320 | C. |
| February | 5.8 | 4.8 | 5.2 | 299 | C. |
| March | 7.1 | 3.9 | 5.5 | 338 | C. |
| April | 7.1 | 4.8 | 5.6 | 333 | C. |
| May | 8.4 | 4.8 | 5.7 | 350 | C. |
| June | 14 | 5.8 | 9.6 | 571 | C. |
| July | 16 | 12 | 14.3 | 879 | C. |
| August | 21 | 5.8 | 11.9 | 732 | C. |
| September | 8.4 | 4.8 | 6.5 | 387 | C. |
| The year | 21 | 3.9 | 6.89 | 5,010 | |
| **1908-9.** | | | | | |
| October | 5.6 | 3.0 | 4.1 | 252 | C. |
| November | 3.0 | 3.0 | 3.0 | 179 | C. |
| December | 3.0 | 3.0 | 3.0 | 184 | C. |
| January | 11 | 3.3 | 4.68 | 288 | C. |
| February | 6.8 | 5.0 | 6.35 | 353 | C. |
| March | 8.8 | 3.3 | 4.42 | 272 | C. |
| April | 8.8 | 6.8 | 7.67 | 456 | C. |
| May | 21 | 8.8 | 12.1 | 744 | C. |
| June | 62 | 21 | 37.0 | 2,200 | B. |
| July | 77 | 16 | 41.5 | 2,550 | B. |
| August | 16 | 11 | 13.0 | 799 | C. |
| September | 8.8 | 5.0 | 6.81 | 405 | C. |
| The year | 77 | 3 | 12.0 | 8,680 | |
| **1909-10.** | | | | | |
| October | 6.8 | 1.0 | 4.32 | 266 | D. |
| November | 6.8 | 1.0 | 4.87 | 290 | D. |
| December | 47 | 6.8 | 16.3 | 1,000 | B. |
| January | 33 | 6 | 12.3 | 756 | B. |
| February | 14 | 6 | 8.20 | 455 | B. |
| March | 9.5 | 6 | 7.24 | 445 | B. |
| April | 14 | 6 | 8.55 | 509 | B. |
| May | 40 | 6 | 13.5 | 830 | B. |
| June | 33 | 14 | 21.5 | 1,280 | B. |
| July | 54 | 14 | 23.2 | 1,430 | B. |
| August | 21 | 5 | 15.3 | 941 | B. |
| September | 9.5 | .5 | 4.72 | 281 | C. |
| The year | 54 | .5 | 11.7 | 8,480 | |
| **1910-11.** | | | | | |
| October | 9.5 | 3.5 | 3.81 | 234 | C. |
| November | 7 | 3.5 | 3.62 | 215 | C. |
| December | 7 | 3.5 | 4.06 | 250 | C. |
| January | 52 | 3.5 | 7.26 | 446 | B. |
| February | 24 | 3.5 | 5.71 | 317 | C. |

### TABOOSE CREEK NEAR ABERDEEN,[1] CAL.

This station, which was located at a point on the crossing of the upper main highway about 4 miles northwest of Aberdeen, in sec. 16, T. 11 S., R. 34 E., was established August 20, 1906, about half a mile

[1] Formerly known as Tibbetts.

west of the point of crossing of the lower main highway 2 miles northwest of Aberdeen railway station and about 15 miles north of Independence. It was removed to the present site on February 25, 1907. Discharge measurements had been made at the original site from the first of 1906.

No water is diverted above or near the station. The drainage area above the mouth of the canyon is about 7 square miles.

The gage is a vertical staff on the left bank. On March 7, 1910, its datum was lowered 1 foot. All gage heights for 1910–11 are referred to the new datum.

The channel is composed of shifting sand.

The record may be considered fair.

The station was discontinued February 28, 1911.

*Discharge measurements of Taboose Creek near Aberdeen, Cal., in 1906–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* |
| 1906. | | | |
| Jan. 18 | G. R. Shuey | | 3.6 |
| Feb. 21 | do | | 2.7 |
| Mar. 20 | do | | 3.6 |
| 27 | do | | 3.5 |
| Apr. 6 | do | | 3.4 |
| 12 | do | | 4.2 |
| 19 | do | | 8.0 |
| 24 | do | | 8.4 |
| May 2 | do | | 6.8 |
| 8 | do | | 12 |
| 16 | do | | 12 |
| 23 | do | | 11 |
| June 1 | do | | 8.9 |
| 11 | do | | 22 |
| July 2 | do. [a] | | 29 |
| 7 | do | | 46 |
| 14 | do | | 56 |
| 27 | do | | 45 |
| Aug. 2 | do | 2.35 | 23 |
| Oct. 8 | do | 1.80 | 3.4 |
| Dec. 8 | do | 1.65 | 3.6 |
| 1907. | | | |
| Feb. 4 | G. R. Shuey | 1.50 | 1.3 |
| 25 | do | .20 | 2.1 |
| Mar. 29 | do | .20 | 3.2 |
| Apr. 10 | do | .20 | 4.8 |
| 15 | do | .25 | 8.1 |
| May 6 | do | .24 | 7.0 |
| June 13 | do | .60 | 12 |
| 29 | do | .65 | 19 |
| July 11 | do | .60 | 22 |
| Aug. 2 | Shuey and Post | .60 | 26 |
| 11 | R. B. Post | .48 | 11 |
| 27 | do | .25 | 7.8 |
| Sept. 9 | do | .15 | 7 |
| 30 | do | .05 | 3.4 |
| Oct. 21 | do | .08 | 3.7 |
| Nov. 5 | do | .05 | 4.2 |
| 29 | do | .00 | 3.3 |
| Dec. 12 | do | .50 | 3.3 |
| 1908. | | | |
| Feb. 15 | R. B. Post | .43 | 2.4 |
| Mar. 10 | do | .42 | 2.2 |
| 21 | do | .43 | 2.4 |
| Apr. 9 | do | .17 | 2.3 |
| 29 | do | .22 | 3.7 |
| May 2 | do | .27 | 5.9 |
| 1908. | | | |
| May 21 | R. B. Post | .30 | 3.1 |
| June 17 | do | .47 | 6.9 |
| 26 | do | .48 | 7.0 |
| July 8 | do | .63 | 12 |
| 14 | Lamb and Post | .63 | 12 |
| 31 | W. A. Lamb | .59 | 11 |
| Aug. 12 | do | .50 | 9.7 |
| 24 | do | .40 | 5.2 |
| Sept. 4 | do | .36 | 4.3 |
| 14 | do | .39 | 5.2 |
| Oct. 5 | do | .30 | 4.3 |
| 21 | Barrows and Lamb | .31 | 4.5 |
| Nov. 9 | A. T. Barrows | .28 | 3.8 |
| 1909. | | | |
| Jan. 20 | Haines and Lee | .26 | 3.2 |
| Feb. 8 | R. E. Haines | .26 | 3.5 |
| 24 | do | .21 | 3.0 |
| Mar. 15 | do | .22 | 2.8 |
| Apr. 5 | do | .24 | 3.3 |
| 26 | do | .34 | 5.3 |
| May 17 | do | .37 | 6.4 |
| June 7 | do | .70 | 23.1 |
| 28 | do | .95 | 31.6 |
| July 19 | do | .58 | 18.4 |
| Aug. 9 | do | .30 | 10.3 |
| 30 | do | .27 | 10.0 |
| Sept. 20 | do | .06 | 4.3 |
| Oct. 11 | do | .03 | 4.3 |
| Nov. 1 | do | .00 | 4.2 |
| 22 | do | .03 | 3.9 |
| 1910. | | | |
| Mar. 7 | R. E. Haines | .90 | 2.2 |
| 28 | do | .95 | 3.6 |
| Apr. 23 | do | 1.05 | 4.7 |
| May 9 | do | 1.16 | 5.3 |
| June 23 | C. H. Lee | 1.11 | 9.0 |
| July 13 | do | 1.19 | 11.0 |
| Aug. 1 | do | 1.10 | 8.3 |
| 22 | F. G. Wood | .98 | 5.8 |
| Sept. 16 | G. T. Peekema | .81 | 3.8 |
| Oct. 20 | do | .96 | 2.9 |
| Nov. 16 | do | .79 | 3.0 |
| Dec. 19 | do | .79 | 3.0 |
| 1911. | | | |
| Jan. 23 | G. T. Peekema | .79 | 3.0 |

NOTE.—Gage moved 2 miles up stream and set at different datum Feb. 25, 1907. Gage datum lowered 1 foot on Mar. 7, 1910.

*Daily gage height, in feet, of Taboose Creek near Aberdeen, Cal., for 1906–1911.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1906. | | | 1906. | | | 1906. | | |
| 1 | | 2.1 | 11 | | 2.2 | 21 | 2.35 | 2.1 |
| 2 | | 2.1 | 12 | | 2.2 | 22 | 2.30 | 2.05 |
| 3 | | 2.1 | 13 | | 2.2 | 23 | 2.25 | 2.07 |
| 4 | | 2.2 | 14 | | 2.25 | 24 | | 1.95 |
| 5 | | 2.2 | 15 | | 2.25 | 25 | 2.15 | 1.9 |
| 6 | | 2.18 | 16 | | 2.26 | 26 | 2.1 | 1.88 |
| 7 | | 2.2 | 17 | | 2.25 | 27 | 2.1 | 1.9 |
| 8 | | 2.18 | 18 | | 2.28 | 28 | 2.1 | 1.9 |
| 9 | | 2.2 | 19 | 2.30 | 2.25 | 29 | 2.1 | 1.88 |
| 10 | | 2.2 | 20 | 2.32 | 2.15 | 30 | 2.1 | 1.85 |
| | | | | | | 31 | 2.1 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 1 | 1.85 | | 1.75 | 1.6 | | 0.2 | 0.2 | 0.8 | | 0.7 | | |
| 2 | 1.85 | | | | 1.6 | | | | | | 0.6 | 0.2 |
| 3 | 1.85 | 1.7 | 1.7 | 1.6 | | | .2 | | 1.0 | .8 | | |
| 4 | 1.85 | | | | | .2 | | .8 | | | | |
| 5 | 1.85 | 1.7 | 1.7 | 1.6 | 1.55 | | .2 | | 1.1 | .9 | | |
| 6 | 1.84 | | | | | .2 | | .75 | | | .55 | .15 |
| 7 | | 1.8 | 1.65 | | 1.55 | | | | 1.0 | | | |
| 8 | 1.80 | | 1.65 | 1.6 | | .2 | .2 | .7 | | | | |
| 9 | 1.82 | | | | 1.55 | | | | .9 | .7 | .5 | .15 |
| 10 | | 1.75 | | 1.6 | | | .2 | .75 | | | | |
| 11 | | | 1.65 | | | .2 | | | .75 | .6 | | |
| 12 | | | | 1.6 | 1.55 | | .25 | | | | .4 | |
| 13 | 1.82 | 1.7 | 1.65 | | | .2 | | .75 | .6 | .6 | | .2 |
| 14 | | | | | 1.5 | | | | | | | |
| 15 | 1.82 | 1.7 | 1.65 | 1.6 | | .2 | .25 | .8 | | .6 | | |
| 16 | | | | | 1.5 | | | | | | .4 | .15 |
| 17 | 1.81 | 1.75 | | 1.6 | | | .25 | .8 | .55 | .6 | | |
| 18 | | | 1.6 | | 1.5 | .5 | | | | | | |
| 19 | | 1.75 | | 1.6 | | | .25 | | .5 | .6 | .4 | |
| 20 | 1.80 | | 1.6 | | 1.5 | .35 | | .8 | | | | .1 |
| 21 | | 1.75 | | | | | | | .5 | | | |
| 22 | | | 1.6 | 1.6 | 1.5 | .3 | .75 | .8 | | .45 | | |
| 23 | 1.80 | | | | | | | | | | .4 | .1 |
| 24 | | 1.75 | 1.6 | 1.6 | | | .8 | .75 | .55 | .5 | | |
| 25 | 1.80 | | | | .2 | .25 | | | | | | |
| 26 | | | 1.6 | 1.6 | | | .8 | | .6 | .55 | .35 | |
| 27 | 1.8 | 1.75 | | | .2 | .2 | | .8 | | | | .1 |
| 28 | | | | | | | | | .65 | | | |
| 29 | 1.8 | 1.75 | 1.6 | 1.6 | | .2 | .8 | .85 | | .5 | .3 | |
| 30 | | | | | | | | | | | | .1 |
| 31 | 1.78 | | | 1.6 | | | | .9 | | .5 | | |
| 1907-8. | | | | | | | | | | | | |
| 1 | | .1 | | | | | | .3 | .4 | | | |
| 2 | | | .05 | | | .45 | | | | | | |
| 3 | | | | .5 | .45 | | .45 | | | .5 | .6 | |
| 4 | .1 | .05 | | | | | | .3 | | | | .4 |
| 5 | | | | | | | | | .3 | | | |
| 6 | | | .05 | .5 | | .45 | .45 | | | .6 | | |
| 7 | .1 | | | | .45 | | | | | | .6 | .45 |
| 8 | | .05 | | | | | | .3 | .4 | | | |
| 9 | | | .05 | | | .45 | | | | | | |
| 10 | | | | .5 | .45 | | .2 | | | .6 | .6 | |
| 11 | .1 | .05 | | | | | | .25 | | | | .5 |
| 12 | | | | | | | | | .5 | | | |
| 13 | | | .5 | .5 | | .45 | .2 | | | .7 | | |
| 14 | .05 | | | | .45 | | | | | | .5 | .5 |
| 15 | | .05 | | | | | | .25 | .45 | | | |
| 16 | | | .5 | | | .45 | | | | | | |
| 17 | | | | .5 | .45 | | .2 | | | .6 | .45 | |
| 18 | .05 | .05 | | | | | | .2 | | | | .45 |
| 19 | | | | | | | | | .5 | | | |
| 20 | | | .5 | .5 | | .45 | .2 | | | .55 | | |
| 21 | .1 | | | | .45 | | | | | | .4 | .35 |
| 22 | | .05 | | | | | | .2 | .45 | | | |
| 23 | | | .5 | | | .45 | | | | | | |
| 24 | | | | .5 | .45 | | .2 | | | .6 | .45 | |
| 25 | .1 | .05 | | | | | | .3 | | | | .4 |

*Daily gage height, in feet, of Taboose Creek near Aberdeen, Cal., for 1906–1911*—Continued

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 26 | | | | | | | | | 0.5 | | | |
| 27 | | | 0.5 | 0.5 | | 0.45 | 0.25 | | | 0.6 | | |
| 28 | 0.1 | | | | 0.45 | | | | | | 0.45 | 0.4 |
| 29 | | 0.05 | | | | | | 0.4 | .5 | | | |
| 30 | | | .5 | | | .45 | | | | | | |
| 31 | | | | .45 | | | | | | | .4 | |
| 1908–9. | | | | | | | | | | | | |
| 1 | | | | .3 | .3 | .2 | | | | | | |
| 2 | .25 | .3 | | | | | .25 | | | 1.15 | .3 | |
| 3 | | | | | | | | .45 | | | | .3 |
| 4 | | | .3 | .25 | | | | | .9 | | | |
| 5 | .25 | | | | .3 | .2 | .25 | | | .8 | | |
| 6 | | .3 | | | | | | | | | .3 | .2 |
| 7 | | | .35 | | | | | .5 | .7 | | | |
| 8 | | | | .3 | .3 | .25 | | | | | | |
| 9 | .3 | .3 | | | | | .25 | | | .7 | .3 | |
| 10 | | | | | | | | .5 | | | | .1 |
| 11 | | | .4 | .3 | | | | | .65 | | | |
| 12 | .3 | | | | .3 | .2 | .25 | | | .75 | | |
| 13 | | .3 | | | | | | | | | .25 | .05 |
| 14 | | | .55 | | | | | .4 | .7 | | | |
| 15 | | | | .3 | .3 | .2 | | | | | | |
| 16 | .3 | .3 | | | | | .3 | | | .7 | .25 | |
| 17 | | | | | | | | .4 | | | | .1 |
| 18 | | | .6 | .3 | | | | | .7 | | | |
| 19 | .3 | | | | .3 | .25 | .4 | | | .7 | | |
| 20 | | .3 | | .25 | | | | | | | .3 | .05 |
| 21 | | | .3 | | | | | .4 | .7 | | | |
| 22 | | | | .3 | .3 | .25 | | | | | | |
| 23 | .3 | .3 | | | | | .35 | | | .6 | .3 | |
| 24 | | | | | .2 | | | .4 | | | | .05 |
| 25 | | | .3 | .3 | | | | | .95 | | | |
| 26 | .3 | | | | .25 | .25 | .35 | | | .5 | | |
| 27 | | .3 | | | | | | | | | .3 | |
| 28 | | | .3 | | | | | .45 | 1.0 | | | .00 |
| 29 | | | | .3 | | .2 | | | | | | |
| 30 | .3 | .3 | | | | | .4 | | | .4 | .3 | |
| 31 | | | | | | | | .6 | | | | |
| 1909–10. | | | | | | | | | | | | |
| 1 | .06 | .00 | | | | | .95 | | | | 1.2 | |
| 2 | | | | | | | | 1.1 | | | | .9 |
| 3 | | | −.06 | .95 | | | | | 1.35 | 1.15 | | |
| 4 | .06 | | | | .9 | .9 | .95 | | | | | |
| 5 | | .00 | | | | | | | | | 1.1 | .85 |
| 6 | | | −.06 | | | | | 1.1 | 1.4 | | | |
| 7 | | | | 1.9 | .9 | 1.0 | | | | 1.1 | | |
| 8 | .06 | .00 | | | | | .95 | | | | 1.1 | |
| 9 | | | | | | | | 1.15 | | | | .8 |
| 10 | | | −.06 | .95 | | | | | 1.25 | | | |
| 11 | .06 | | | | .9 | 1.0 | 1.00 | | | 1.15 | | |
| 12 | | .00 | | | | | | | | | 1.06 | .8 |
| 13 | | | .00 | | | | | 1.1 | 1.3 | | | |
| 14 | | | | .95 | .9 | 1.0 | | | | | | |
| 15 | .06 | .00 | | | | | .98 | | | 1.2 | 1.0 | |
| 16 | | | | | | | | 1.2 | | | | .8 |
| 17 | | | −.06 | .95 | | | | | 1.2 | | | |
| 18 | .00 | | | | .95 | 1.0 | .98 | | | 1.2 | | |
| 19 | | .00 | | | | | | | | | .95 | .8 |
| 20 | | | −.05 | | | | | 1.15 | 1.2 | | | |
| 21 | | | | .9 | .9 | 1.0 | | | | | | |
| 22 | .00 | .00 | | | | | 1.00 | | | 1.3 | 1.0 | |
| 23 | | | | | | | | 1.25 | | | | .8 |
| 24 | | | .5 | .9 | | | | | 1.15 | | | |
| 25 | .00 | | | | .9 | 1.0 | 1.10 | | | 1.2 | | |
| 26 | | −.05 | | | | | | | | | .95 | .8 |
| 27 | | | .3 | | | | | 1.25 | 1.2 | | | |
| 28 | | | | .9 | .9 | .95 | | | | | | |
| 29 | .00 | −.05 | | | | | 1.10 | | | 1.2 | .95 | |
| 30 | | | | | | | | | 1.2 | | | .8 |
| 31 | | | .1 | .9 | | | | 1.4 | | | | |

*Daily gage height, in feet, of Taboose Creek near Aberdeen, Cal., for 1906–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | 1910-11. | | | | | |
| 1 | | | | | | 16 | | | 0.8 | 0.8 | |
| 2 | | | 0.8 | 0.8 | | 17 | 0.85 | | | | 1.25 |
| 3 | 0.8 | | | | 0.9 | 18 | | 0.8 | | | |
| 4 | | 0.8 | | | | 19 | | | .8 | | |
| 5 | | | .8 | | | 20 | | | | .8 | .8 |
| 6 | | | | .8 | .8 | 21 | .9 | .8 | | | |
| 7 | .8 | .8 | | | | 22 | | | | | |
| 8 | | | | | | 23 | | | .8 | .8 | |
| 9 | | | .8 | .8 | | 24 | .85 | | | | .78 |
| 10 | .8 | | | | .8 | 25 | | .8 | | | |
| 11 | | .8 | | | | 26 | | | .8 | | |
| 12 | | | .8 | | | 27 | | | | .8 | .78 |
| 13 | | | | .8 | .8 | 28 | .8 | .8 | | | |
| 14 | .9 | .8 | | | | 29 | | | | | |
| 15 | | | | | | 30 | | | .8 | 1.05 | |
| | | | | | | 31 | .8 | | | | |

NOTE.—Gage moved 2 miles upstream and installed at a different datum Feb. 25, 1907. Beginning January, 1910, gage heights refer to a datum 1 foot lower than those prior to Jan. 1, 1910.

*Daily discharge, in second-feet, of Taboose Creek near Aberdeen, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 4.4 | 4.4 | 2.5 | 2.5 | 7.1 | 13 | 37 | 10 | 10 |
| 2 | 4.4 | 4.4 | 2.5 | 3.3 | 7.1 | 23 | 30 | 10 | 10 |
| 3 | 4.4 | 4.4 | 2.5 | 3.3 | 8.6 | 28 | 23 | 10 | 10 |
| 4 | 3.3 | 4.4 | 2.5 | 3.3 | 10 | 30 | 30 | 10 | 10 |
| 5 | 4.4 | 4.4 | 2.5 | 3.3 | 10 | 28 | 28 | 10 | 7.6 |
| 6 | 4.4 | 4.4 | 2.5 | 3.3 | 10 | 28 | 28 | 10 | 7.6 |
| 7 | 4.4 | 4.4 | 2.5 | 3.3 | 10 | 23 | 28 | 10 | 7.6 |
| 8 | 4.4 | 4.4 | 3.3 | 3.3 | 10 | 23 | 23 | 10 | 6.3 |
| 9 | 4.4 | 4.4 | 2.5 | 3.3 | 10 | 23 | 23 | 10 | 5.2 |
| 10 | 4.4 | 4.4 | 2.5 | 3.3 | 10 | 23 | 23 | 10 | 5.2 |
| 11 | 4.4 | 4.4 | 2.5 | 3.3 | 10 | 21 | 23 | 10 | 5.2 |
| 12 | 4.4 | 4.4 | 2.5 | 3.3 | 8.6 | 23 | 25 | 10 | 5.2 |
| 13 | 4.4 | 4.4 | 2.5 | 4.4 | 7.1 | 23 | 23 | 9 | 4.3 |
| 14 | 4.4 | 4.4 | 2.5 | 4.4 | 7.1 | 23 | 23 | 9 | 5.2 |
| 15 | 4.4 | 4.4 | 2.5 | 4.4 | 7.1 | 23 | 23 | 9 | 5.2 |
| 16 | 4.4 | 4.4 | 2.5 | 4.4 | 7.1 | 23 | 23 | 9 | 5.2 |
| 17 | 4.4 | 4.4 | 2.5 | 4.4 | 7.1 | 23 | 23 | 10 | 5.2 |
| 18 | 4.4 | 4.4 | 2.5 | 7.1 | 7.1 | 23 | 23 | 10 | 5.2 |
| 19 | 4.4 | 4.4 | 3.3 | 7.1 | 7.1 | 23 | 23 | 10 | 5.2 |
| 20 | 3.3 | 4.4 | 3.3 | 7.1 | 7.1 | 23 | 23 | 10 | 4.3 |
| 21 | 4.4 | 4.4 | 3.3 | 7.1 | 7.1 | 23 | 21 | 10 | 4.3 |
| 22 | 1.4 | 4.4 | 3.3 | 7.1 | 7.1 | 24 | 20 | 10 | 4.3 |
| 23 | 4.4 | 3.3 | 3.3 | 5.7 | 7.1 | 28 | 20 | 10 | 4.3 |
| 24 | 4.4 | 2.5 | 3.3 | 5.7 | 7.1 | 30 | 20 | 10 | 4.3 |
| 25 | 4.4 | 2.5 | 3.3 | 5.7 | 7.1 | 22 | 16 | 10 | 3.7 |
| 26 | 4.4 | 3.3 | 3.3 | 5.7 | 7.1 | 33 | 16 | 10 | 3.7 |
| 27 | 4.4 | 2.5 | 2.5 | 7.1 | 7.1 | 33 | 16 | 10 | 3.7 |
| 28 | 4.4 | 2.5 | 2.5 | 7.1 | 8.6 | 33 | 15 | 10 | 3.7 |
| 29 | 4.4 | | 2.5 | 7.1 | 10 | 35 | 13 | 10 | 3.7 |
| 30 | 4.4 | | 2.5 | 7.1 | 18 | 37 | 13 | 10 | 3.7 |
| 31 | 4.4 | | 2.5 | | 13 | | 13 | 10 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | 4.3 | 3.7 | 3.4 | 3 | 2 | 2 | 3 | 5 | 15 | 11 | 11 | 4 |
| 2 | 4.3 | 3.7 | 3.4 | 3 | 2 | 2 | 3 | 5 | 14 | 10 | 11 | 4 |
| 3 | 4.3 | 3.7 | 3.4 | 3 | 2 | 2 | 3 | 5 | 13 | 10 | 10 | 4 |
| 4 | 4.3 | 3.7 | 3.4 | 5 | 2 | 2 | 3 | 5 | 14 | 10 | 9 | 4 |
| 5 | 4.3 | 3.7 | 3.4 | 10 | 2 | 3 | 3 | 4 | 14 | 9 | 8 | 4 |
| 6 | 4.3 | 3.7 | 3.4 | 15 | 2 | 3 | 3 | 4 | 15 | 8 | 8 | 4 |
| 7 | 4.3 | 3.7 | 3.4 | 20 | 2 | 4 | 3 | 4 | 14 | 8 | 8 | 4 |
| 8 | 4.3 | 3.7 | 3.4 | 15 | 2 | 4 | 3 | 5 | 13 | 8 | 8 | 3 |
| 9 | 4.3 | 3.7 | 3.4 | 5 | 2 | 4 | 3 | 5 | 12 | 9 | 8 | 3 |
| 10 | 4.3 | 3.7 | 3.4 | 3 | 2 | 4 | 4 | 5 | 11 | 10 | 8 | 3 |

*Daily discharge, in second-feet, of Taboose Creek near Aberdeen, Cal., for 1909–1911—Con.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 11 | 4.3 | 3.7 | 3.4 | 3 | 2 | 4 | 4 | 5 | 11 | 10 | 7 | 3 |
| 12 | 4.3 | 3.7 | 3.7 | 3 | 2 | 4 | 4 | 5 | 12 | 10 | 7 | 3 |
| 13 | 4.3 | 3.7 | 3.7 | 3 | 2 | 4 | 4 | 5 | 13 | 11 | 7 | 3 |
| 14 | 4.3 | 3.7 | 3.7 | 3 | 2 | 4 | 4 | 5 | 13 | 11 | 6 | 3 |
| 15 | 4.3 | 3.7 | 3.7 | 3 | 2 | 4 | 4 | 6 | 12 | 11 | 6 | 3 |
| 16 | 4.3 | 3.7 | 3.4 | 3 | 2 | 4 | 4 | 7 | 11 | 11 | 6 | 3 |
| 17 | 3.7 | 3.7 | 3.4 | 3 | 3 | 4 | 4 | 7 | 11 | 11 | 6 | 3 |
| 18 | 3.7 | 3.7 | 3.4 | 3 | 3 | 4 | 4 | 7 | 11 | 11 | 6 | 3 |
| 19 | 3.7 | 3.7 | 3.4 | 3 | 3 | 4 | 4 | 6 | 11 | 11 | 6 | 3 |
| 20 | 3.7 | 3.7 | 3.4 | 2 | 2 | 4 | 4 | 6 | 11 | 12 | 6 | 3 |
| 21 | 3.7 | 3.7 | 3.7 | 2 | 2 | 4 | 4 | 7 | 10 | 13 | 6 | 3 |
| 22 | 3.7 | 3.7 | 7.6 | 2 | 2 | 4 | 4 | 8 | 10 | 14 | 6 | 3 |
| 23 | 3.7 | 3.7 | 13 | 2 | 2 | 4 | 5 | 9 | 9 | 13 | 6 | 3 |
| 24 | 3.7 | 3.7 | 16 | 2 | 2 | 4 | 5 | 9 | 10 | 12 | 6 | 3 |
| 25 | 3.7 | 3.4 | 16 | 2 | 2 | 4 | 5 | 9 | 10 | 11 | 6 | 3 |
| 26 | 3.7 | 3.4 | 10 | 2 | 2 | 4 | 5 | 10 | 11 | 11 | 6 | 3 |
| 27 | 3.7 | 3.4 | 10 | 2 | 2 | 3 | 5 | 10 | 11 | 11 | 6 | 3 |
| 28 | 3.7 | 3.4 | 10 | 2 | 2 | 3 | 5 | 11 | 11 | 11 | 6 | 3 |
| 29 | 3.7 | 3.4 | 7.6 | 2 | ...... | 3 | 5 | 12 | 11 | 11 | 6 | 3 |
| 30 | 3.7 | 3.4 | 5.2 | 2 | ...... | 3 | 5 | 13 | 11 | 11 | 5 | 3 |
| 31 | 3.7 | ...... | 5.2 | 2 | ...... | 3 | ...... | 15 | ...... | 11 | 5 | . |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 3 | 3 | 3 | 3 | 9 | 16 | 4 | 3 | 3 | 3 | 3 |
| 2 | 3 | 3 | 3 | 3 | 6 | 17 | 4 | 3 | 3 | 3 | 3 |
| 3 | 3 | 3 | 3 | 3 | 4 | 18 | 4 | 3 | 3 | 3 | 3 |
| 4 | 3 | 3 | 3 | 3 | 4 | 19 | 3 | 3 | 3 | 3 | 3 |
| 5 | 3 | 3 | 3 | 3 | 3 | 20 | 3 | 3 | 3 | 3 | 3 |
| 6 | 3 | 3 | 3 | 3 | 3 | 21 | 4 | 3 | 3 | 3 | 3 |
| 7 | 3 | 3 | 3 | 3 | 3 | 22 | 4 | 3 | 3 | 3 | 3 |
| 8 | 3 | 3 | 3 | 3 | 3 | 23 | 4 | 3 | 3 | 3 | 3 |
| 9 | 3 | 3 | 3 | 3 | 3 | 24 | 4 | 3 | 3 | 3 | 3 |
| 10 | 3 | 3 | 3 | 3 | 3 | 25 | 4 | 3 | 3 | 3 | 3 |
| 11 | 3 | 3 | 3 | 3 | 3 | 26 | 3 | 3 | 3 | 3 | 3 |
| 12 | 3 | 3 | 3 | 3 | 3 | 27 | 3 | 3 | 3 | 3 | 3 |
| 13 | 4 | 3 | 3 | 3 | 3 | 28 | 3 | 3 | 3 | 4 | 3 |
| 14 | 4 | 3 | 3 | 3 | 3 | 29 | 3 | 3 | 3 | 5 | ..... |
| 15 | 4 | 3 | 3 | 3 | 3 | 30 | 3 | 3 | 3 | 7 | ..... |
| | | | | | | 31 | 3 | ........ | 3 | 10 | ..... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to June 1, 1909, well-defined below 7 second-feet. June 2 to Dec. 31, 1909, well defined below 33 second-feet. Jan. 1 to Apr. 24, 1910, poorly defined. Apr. 25 to June 22, 1910, indirect method for shifting channels used. June 23, 1910, to Feb. 28, 1911, fairly well defined. Discharge interpolated for days on which gage was not read, except Jan. 31, 1911, which was estimated.

*Monthly discharge of Taboose Creek near Aberdeen, Cal., for 1906–1911.*

[Drainage area, 13.9 square miles.]

| Month. | Discharge in second-feet. | | | Run-off. | | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| 1906. | | | | | | |
| January | 4.0 | 3.3 | 3.7 | 0.266 | 0.31 | 228 |
| February | 3.0 | 2.7 | 2.9 | .209 | .22 | 161 |
| March | 3.6 | 3.0 | 3.3 | .237 | .27 | 203 |
| April | 8.4 | 3.4 | 5.8 | .417 | .47 | 345 |
| May | 12 | 6.8 | 10.4 | .748 | .86 | 640 |
| June | 28 | 9.0 | 21.8 | 1.57 | 1.75 | 1,300 |
| July | 56 | 29 | 46.3 | 3.33 | 3.84 | 2,850 |
| August | 40 | 15 | 25.7 | 1.85 | 2.13 | 1,580 |
| September | 21 | 5.6 | 15.0 | 1.08 | 1.20 | 893 |
| The period | | | | | | 8,200 |

*Monthly discharge of Taboose Creek near Aberdeen, Cal., for 1906–1911*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1906–7.** | | | | | | |
| October | 5.6 | 3.2 | 3.7 | 0.266 | 0.31 | 228 |
| November | 4.0 | 3.0 | 3.6 | .259 | .29 | 214 |
| December | 4.0 | 3.0 | 3.5 | .252 | .29 | 215 |
| January | 2.3 | 2.3 | 2.3 | .165 | .19 | 141 |
| February | 6.2 | 1.4 | 2.3 | .165 | .17 | 128 |
| March | 14 | 6.2 | 7.3 | .525 | .61 | 448 |
| April | 24 | 6.2 | 12.0 | .863 | .96 | 714 |
| May | 28 | 20 | 23.0 | 1.65 | 1.90 | 1,410 |
| June | 36 | 14 | 21.0 | 1.51 | 1.68 | 1,250 |
| July | 28 | 12 | 18.0 | 1.29 | 1.49 | 1,110 |
| August | 18 | 8.5 | 12.0 | .863 | .99 | 738 |
| September | 6.2 | 4.3 | 5.0 | .360 | .40 | 298 |
| The year | 36 | 1.4 | 9.48 | .682 | 9.28 | 6,890 |
| **1907–8.** | | | | | | |
| October | 4.3 | 3.6 | 4.2 | 0.302 | 0.35 | 258 |
| November | 4.3 | 3.6 | 3.6 | .259 | .29 | 214 |
| December | 3.6 | 2.9 | 3.2 | .230 | .27 | 197 |
| January | 3.0 | 2.4 | 3.0 | .216 | .25 | 184 |
| February | 2.4 | 2.3 | 2.3 | .165 | .18 | 132 |
| March | 2.3 | 2.2 | 2.3 | .165 | .19 | 141 |
| April | 5.2 | 2.5 | 3.1 | .223 | .25 | 184 |
| May | 7.2 | 3.1 | 4.9 | .352 | .41 | 301 |
| June | 8.0 | 4.5 | 6.0 | .432 | .48 | 357 |
| July | 14 | 8.0 | 10.9 | .784 | .90 | 670 |
| August | 11 | 5.7 | 8.2 | .590 | .68 | 504 |
| September | 8 | 5.0 | 6.4 | .460 | .51 | 381 |
| The year | 14 | 2.2 | 4.84 | .348 | 4.76 | 3,520 |
| **1908–9.** | | | | | | |
| October | 5 | 4.0 | 4.5 | 0.324 | 0.37 | 277 |
| November | 4 | 4.0 | 4.0 | .288 | .32 | 238 |
| December | 10 | 4.0 | 5.5 | .396 | .46 | 338 |
| January | 4.4 | 3.3 | 4.33 | .312 | .36 | 266 |
| February | 4.4 | 2.5 | 4.05 | .291 | .31 | 225 |
| March | 3.3 | 2.5 | 2.73 | .196 | .23 | 168 |
| April | 7.1 | 2.5 | 4.92 | .354 | .40 | 293 |
| May | 18 | 7.1 | 8.65 | .622 | .72 | 532 |
| June | 37 | 13 | 25.7 | 1.85 | 2.06 | 1,530 |
| July | 39 | 13 | 22.6 | 1.63 | 1.88 | 1,390 |
| August | 10 | 9.0 | 9.87 | .710 | .82 | 607 |
| September | 10 | 3.7 | 5.64 | .406 | .45 | 336 |
| The year | 39 | 2.5 | 8.54 | .614 | 8.38 | 6,200 |
| **1909–10.** | | | | | | |
| October | 4.3 | 3.7 | 4.01 | 0.288 | 0.33 | 247 |
| November | 3.7 | 3.4 | 3.53 | .254 | .28 | 210 |
| December | 16 | 3.4 | 5.60 | .403 | .46 | 344 |
| January | 30 | 2 | 4.61 | .332 | .38 | 283 |
| February | 3 | 2 | 2.11 | .152 | .16 | 117 |
| March | 4 | 2 | 3.52 | .253 | .29 | 216 |
| April | 5 | 3 | 3.97 | .286 | .32 | 236 |
| May | 15 | 4 | 7.06 | .508 | .59 | 434 |
| June | 15 | 9 | 11.8 | .849 | .95 | 702 |
| July | 14 | 8 | 10.7 | .770 | .89 | 658 |
| August | 11 | 5 | 6.97 | .501 | .58 | 429 |
| September | 4 | 3 | 3.23 | .232 | .26 | 192 |
| The year | 30 | 2 | 5.59 | .402 | 5.49 | 4,070 |
| **1910–11.** | | | | | | |
| October | 4 | 3 | 3.35 | 0.241 | 0.28 | 206 |
| November | 3 | 3 | 3.0 | .216 | .24 | 179 |
| December | 3 | 3 | 3.0 | .216 | .25 | 184 |
| January | 10 | 3 | 3.5 | .252 | .29 | 215 |
| February | 9 | 3 | 3.4 | .245 | .26 | 189 |

NOTE.—Discharge prior to Aug. 19, 1906, determined by interpolating between discharge measurements Aug. 19, 1906, to Dec. 31, 1908, by the indirect method for shifting channels.

## GOODALE CREEK NEAR ABERDEEN, CAL.

This station, which was located at the point where the stream leaves the foothills, about 13 miles north of Independence, 4 miles west of Aberdeen railway station, and one-fourth mile west of the upper road crossing in sec. 16, T. 11 S., R. 34 E., was established September 20, 1906, and discontinued February 28, 1911.

No water is diverted above or near the station. The drainage area above the mouth of Goodale Creek canyon is about 5 square miles.

The gage is a vertical staff on the left bank. On March 7, 1910, the datum was lowered 1 foot; all gage heights for 1910–11 are referred to the new datum.

Discharge measurements were made from the footbridge at the gage. The channel is composed of sand and shifts somewhat. There is but one channel at all stages and the current is swift.

*Discharge measurements of Goodale Creek near Aberdeen, Cal., in 1906–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1906. | | Feet. | Sec.-ft. |
| Apr. [illegible] | G. R. Shuey | | [illegible] |
| [illegible] | do | | [illegible] |
| May [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| June [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| July [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| Oct. [illegible] | do | [illegible] | [illegible] |
| Dec. [illegible] | do | [illegible] | 4.6 |
| 1907. | | | |
| Jan. [illegible] | G. R. Shuey | [illegible] | [illegible] |
| Feb. [illegible] | do | [illegible] | [illegible] |
| Mar. [illegible] | do | [illegible] | [illegible] |
| Apr. [illegible] | do | [illegible] | [illegible] |
| May [illegible] | do | [illegible] | [illegible] |
| June [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| July [illegible] | do | [illegible] | [illegible] |
| Aug. [illegible] | Shuey and Post | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Sept. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Oct. [illegible] | do | [illegible] | [illegible] |
| Nov. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Dec. [illegible] | do | [illegible] | [illegible] |
| 1908. | | | |
| Feb. [illegible] | R. B. Post | .20 | [illegible] |
| Mar. [illegible] | do | .2[illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Apr. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | 4.[illegible] |
| May [illegible] | do | [illegible] | 4.[illegible] |
| [illegible] | do | [illegible] | [illegible] |
| June [illegible] | do | [illegible] | [illegible] |
| 28 | do | .6 | 4.8 |
| 1908. | | Feet. | Sec.-ft. |
| July [illegible] | R. B. Post | 0.50 | [illegible] |
| [illegible] | Post and Lamb | .50 | [illegible] |
| Aug. [illegible] | W. A. Lamb | .34 | [illegible] |
| 24 | do | [illegible] | [illegible] |
| Sept. [illegible] | do | .16 | [illegible] |
| [illegible] | do | .22 | [illegible] |
| Oct. [illegible] | do | .20 | [illegible] |
| 21 | Barrows and Lamb | .17 | [illegible] |
| Nov. [illegible] | do | .15 | [illegible] |
| 1909. | | | |
| Jan. [illegible] | Haines and Lee | .20 | [illegible] |
| Feb. [illegible] | R. E. Haines | .25 | [illegible] |
| 24 | do | .21 | [illegible] |
| Mar. [illegible] | do | .24 | [illegible] |
| Apr. [illegible] | do | [illegible] | [illegible] |
| 26 | do | [illegible] | [illegible] |
| May [illegible] | do | .42 | [illegible] |
| June [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | .45 | [illegible] |
| July [illegible] | do | .70 | [illegible] |
| Aug. [illegible] | do | .50 | [illegible] |
| [illegible] | do | .44 | [illegible] |
| Sept. [illegible] | do | [illegible] | [illegible] |
| Oct. [illegible] | do | [illegible] | [illegible] |
| Nov. [illegible] | do | [illegible] | [illegible] |
| 22 | do | [illegible] | [illegible] |
| 1910. | | | |
| Mar. [illegible] | R. E. Haines | b1.10 | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Apr. 23 | do | [illegible] | [illegible] |
| May [illegible] | do | [illegible] | [illegible] |
| June [illegible] | C. H. Lee | [illegible] | [illegible] |
| July [illegible] | do | [illegible] | [illegible] |
| Aug. [illegible] | Lee and Wood | [illegible] | [illegible] |
| 22 | [illegible] Wood | [illegible] | [illegible] |
| Sept. [illegible] | G. [illegible] Peckham | [illegible] | [illegible] |
| Oct. [illegible] | do | [illegible] | [illegible] |
| Nov. [illegible] | do | [illegible] | [illegible] |
| Dec. [illegible] | do | [illegible] | [illegible] |
| 1911. | | | |
| Jan. 23 | G. F. Peckham | [illegible] | [illegible] |

a At upper road crossing.

b Gage datum lowered 1 foot on this date.

c Formerly known as Tibbetts.

*Daily gage height, in feet, of Goodale Creek near Aberdeen, Cal., for 1906–1908.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | | | | | | | |
| 1 | 0.65 | | 0.6 | 0.5 | | 0.45 | 0.4 | 0.7 | | 0.9 | | |
| 2 | | | | | 0.45 | | | | | | 1.05 | 0.5 |
| 3 | .65 | 0.5 | .6 | .5 | | | .4 | | 0.9 | .95 | | |
| 4 | | | | | | .45 | | .7 | | | | |
| 5 | | .5 | .6 | .5 | .45 | | .4 | | .95 | .95 | | |
| 6 | .65 | | | | | .45 | | .65 | | | .95 | .5 |
| 7 | | .6 | .55 | | .45 | | | | .9 | | | |
| 8 | | | .6 | .5 | | .45 | .45 | .6 | | | | |
| 9 | .62 | | | | .45 | | | | | 1.0 | .95 | .5 |
| 10 | | .55 | | .5 | | | .5 | .65 | .8 | | | |
| 11 | .61 | | .55 | | | .4 | | | | 1.1 | | |
| 12 | | | | .5 | .45 | | .55 | | .75 | | .8 | |
| 13 | .6 | .6 | .55 | | | .4 | | .65 | | 1.05 | | .5 |
| 14 | | | | | .5 | | | | .7 | | | |
| 15 | .6 | .6 | .55 | .5 | | .4 | .6 | .7 | | 1.1 | | |
| 16 | | | | | .5 | | | | | | .85 | .5 |
| 17 | .62 | .65 | | .5 | | | .6 | .7 | .75 | 1.1 | | |
| 18 | | | .5 | | .5 | .6 | | | | | | |
| 19 | | .65 | | .5 | | | .6 | | .8 | 1.1 | .8 | |
| 20 | .6 | | .5 | | .5 | .5 | | .7 | | | | .5 |
| 21 | | .65 | | | | | | | .8 | | | |
| 22 | | | .5 | .5 | .5 | .45 | .95 | .7 | | 1.0 | | |
| 23 | .62 | | | | | | | | | | .75 | .5 |
| 24 | | .6 | .5 | .5 | | | .7 | .65 | .85 | .9 | | |
| 25 | .6 | | | | .45 | .4 | | | | | | |
| 26 | | | .5 | .5 | | | .7 | | .85 | .95 | .7 | |
| 27 | .6 | .6 | | | .45 | .35 | | .7 | | | | .45 |
| 28 | | | | | | | | | .9 | | | |
| 29 | .6 | .6 | .5 | .45 | | .4 | .7 | .75 | | .95 | .65 | |
| 30 | | | | | | | | | | | | .45 |
| 31 | .6 | | | .45 | | | | .8 | | .95 | | |
| 1907–8. | | | | | | | | | | | | |
| 1 | | .4 | | | | | | .45 | .35 | | | |
| 2 | | | .4 | | | .35 | | | | | | |
| 3 | | | | .4 | .35 | | .35 | | | .45 | .4 | |
| 4 | .4 | .4 | | | | | | .3 | | | | .2 |
| 5 | | | | | | | | | .3 | | | |
| 6 | | | .4 | .4 | | .35 | .35 | | | .5 | | |
| 7 | .4 | | | | .35 | | | | | | .5 | .2 |
| 8 | | .4 | | | | | | .3 | .35 | | | |
| 9 | | | .4 | | | .35 | | | | | | |
| 10 | | | | .4 | .35 | | .35 | | | .5 | .4 | |
| 11 | .4 | .4 | | | | | | .3 | | | | .3 |
| 12 | | | | | | | | | .4 | | | |
| 13 | | | .4 | .4 | | .35 | .35 | | | .5 | | |
| 14 | .4 | | | | .35 | | | | | | .3 | .3 |
| 15 | | .4 | | | | | | .3 | .4 | | | |
| 16 | | | .4 | | | .35 | | | | | | |
| 17 | | | | .4 | .35 | | .35 | | | .45 | .25 | |
| 18 | .4 | .4 | | | | | | .35 | | | | .3 |
| 19 | | | | | | | | | .35 | | | |
| 20 | | | .4 | .4 | | .35 | .4 | | | .4 | | |
| 21 | .4 | | | | .35 | | | | | | .25 | .25 |
| 22 | | .4 | | | | | | .3 | .3 | | | |
| 23 | | | .4 | | | .35 | | | | | | |
| 24 | | | | .4 | .35 | | .4 | | | .4 | .25 | |
| 25 | .4 | .4 | | | | | | .3 | | | | .3 |
| 26 | | | | | | | | | .4 | | | |
| 27 | | | .4 | .4 | | .35 | .4 | | | .4 | | |
| 28 | .4 | | | | .35 | | | | | | .2 | .3 |
| 29 | | .4 | | | | | | .3 | .45 | | | |
| 30 | | | .4 | | | .35 | | | | | | |
| 31 | | | | .35 | | | | | | .4 | .2 | |

*Daily gage height, in feet, of Goodale Creek near Aberdeen, Cal., for 1906–1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1908–9.** | | | | | | | | | | | | |
| 1 | | | | 0.2 | 0.2 | 0.2 | | | | | | |
| 2 | 0.25 | 0.15 | | | | | 0.2 | | | 1.15 | 0.5 | |
| 3 | | | | | | | | 0.5 | | | | 0.4 |
| 4 | | | 0.2 | .15 | | | | | 0.9 | | | |
| 5 | .2 | | | | .2 | .2 | .2 | | | .85 | | |
| 6 | | .15 | | | | | | | | | .5 | |
| 7 | | | .2 | | | | | .55 | .8 | | | .35 |
| 8 | | | | .2 | .2 | .2 | | | | | | |
| 9 | .25 | .15 | | | | | .25 | | | .8 | .5 | |
| 10 | | | | | | | | .55 | | | | .3 |
| 11 | | | .25 | .2 | | | | | .75 | | | |
| 11 | .25 | | | | .2 | .2 | .25 | | | .85 | | |
| 13 | | .18 | | | | | | | | | .45 | .3 |
| 14 | | | .3 | | | | | .4 | .85 | | | |
| 15 | | | | .2 | .2 | .2 | | | | | | |
| 16 | .2 | .18 | | | | | .25 | | | .8 | .4 | |
| 17 | | | | | | | | .4 | | | | .3 |
| 18 | | | .3 | .2 | | | | | .75 | | | |
| 19 | .18 | | | | .2 | .2 | .4 | | | .85 | | |
| 20 | | .15 | | .1 | | | | | | | .5 | .3 |
| 21 | | | .2 | | | | | .5 | .8 | | | |
| 22 | | | | | .2 | .2 | | | | | | |
| 23 | .2 | .2 | | | | | .35 | | | .7 | .5 | |
| 24 | | | | | .2 | | | .5 | | | | .3 |
| 25 | | | .18 | .2 | | | | | 1.0 | | | |
| 26 | .15 | | | | .2 | .2 | .3 | | | .6 | | |
| 27 | | .2 | | | | | | | | | .45 | .25 |
| 28 | | | .18 | | | | | .5 | 1.0 | | | |
| 29 | | | | .2 | | .2 | | | | | | |
| 30 | .15 | .2 | | | | | .4 | | | .55 | .4 | |
| 31 | | | | | | | | .7 | | | | |
| **1909–10.** | | | | | | | | | | | | |
| 1 | .2 | .2 | | | | | 1.0 | | | | 1.1 | |
| 2 | | | | | | | | 1.2 | | | | 1.0 |
| 3 | | | .15 | 1.1 | | | | | 1.3 | 1.15 | | |
| 4 | .15 | | | | 1.0 | 1.05 | 1.0 | | | | | |
| 5 | | .2 | | | | | | | | | 1.1 | 1.0 |
| 6 | | | .15 | | | | | 1.15 | 1.3 | | | |
| 7 | | | | 1.2 | 1.0 | 1.1 | | | | 1.1 | | |
| 8 | .2 | .2 | | | | | 1.0 | | | | 1.1 | |
| 9 | | | | | | | | 1.15 | | | | .95 |
| 10 | | | .15 | 1.05 | | | | | 1.25 | | | |
| 11 | .2 | | | | 1.0 | 1.1 | 1.05 | | | 1.2 | | |
| 12 | | .2 | | | | | | | | | 1.05 | 1.0 |
| 13 | | | .15 | | | | | 1.2 | 1.3 | 1.2 | | |
| 14 | | | | 1.05 | 1.0 | 1.1 | | | | | | |
| 15 | .2 | .2 | | | | | 1.05 | | | 1.2 | 1.05 | |
| 16 | | | | | | | | 1.25 | | | | 1.0 |
| 17 | | | .1 | 1.0 | | | | | 1.2 | | | |
| 18 | .2 | | | | 1.0 | 1.1 | 1.1 | | | 1.2 | | |
| 19 | | .2 | | | | | | | | | 1.0 | 1.0 |
| 20 | | | .1 | | | | | 1.2 | 1.2 | | | |
| 21 | | | | 1.0 | 1.0 | 1.1 | | | | | | |
| 22 | .2 | .2 | | | | | 1.15 | | | 1.2 | 1.0 | |
| 23 | | | | | | | 1.18 | 1.25 | 1.2 | | | 1.0 |
| 24 | | | .6 | 1.0 | | | | | 1.2 | | | |
| 25 | .2 | | | | 1.0 | 1.0 | 1.2 | | | 1.15 | | |
| 26 | | .15 | | | | | | | | | 1.0 | 1.0 |
| 27 | | | .45 | | | | | 1.25 | 1.2 | | | |
| 28 | | | | 1.0 | 1.0 | 1.0 | | | | | | |
| 29 | .15 | .15 | | | | | 1.2 | | | 1.15 | 1.0 | |
| 30 | | | | | | | | | 1.2 | | | 1.0 |
| 31 | | | .15 | 1.0 | | | | 1.3 | | | | |

*Daily gage height, in feet, of Goodale Creek near Aberdeen, Cal., for 1906–1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | 1910-11. | | | | | |
| 1 | | | | | | 16 | | 0.95 | 0.95 | 0.95 | |
| 2 | | | 0.95 | 0.95 | | 17 | 1.0 | | | | 1.25 |
| 3 | 1.0 | | | | 0.98 | 18 | | .95 | | | |
| 4 | | 0.95 | | | | 19 | | | .95 | | |
| 5 | | | .95 | | | 20 | .97 | | | .95 | .92 |
| 6 | | | | .95 | .95 | 21 | 1.0 | .95 | | | |
| 7 | 1.0 | .95 | | | | 22 | | | | | |
| 8 | | | | | | 23 | | | .95 | .95 | |
| 9 | | | .95 | .95 | | 24 | .95 | | | | .92 |
| 10 | 1.0 | | | | .95 | 25 | | .95 | | | |
| 11 | | .95 | | | | 26 | | | .95 | | |
| 12 | | | .95 | | | 27 | | | | .95 | .92 |
| 13 | | | | .95 | .95 | 28 | | .95 | | | |
| 14 | 1.0 | .95 | | | | 29 | .95 | | | | |
| 15 | | | | | | 30 | | | .95 | 1.15 | |
| | | | | | | 31 | .95 | | | | |

NOTE.—Beginning Jan. 1, 1910, gage heights refer to datum 1 foot lower than those previous to that date.

*Daily discharge, in second-feet, of Goodale Creek near Aberdeen, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 2.4 | 2.4 | 2.4 | 2.4 | 6.2 | 14 | 26 | 9.5 | 7.3 |
| 2 | 2.4 | 2.4 | 2.4 | 2.4 | 8.8 | 17 | 27 | 9.5 | 7.3 |
| 3 | 2.4 | 2.4 | 2.4 | 2.4 | 8.8 | 20 | 23 | 9.5 | 7.3 |
| 4 | 2.1 | 2.4 | 2.4 | 2.4 | 8.8 | 20 | 20 | 9.5 | 7.3 |
| 5 | 2.4 | 2.4 | 2.4 | 2.4 | 8.8 | 20 | 18 | 9.5 | 7.3 |
| 6 | 2.4 | 2.4 | 2.4 | 2.4 | 8.8 | 17 | 17 | 9.5 | 6.3 |
| 7 | 2.4 | 2.4 | 2.4 | 2.4 | 10 | 17 | 17 | 9.5 | 5.4 |
| 8 | 2.4 | 2.4 | 2.4 | 2.4 | 10 | 17 | 17 | 9.5 | 5.4 |
| 9 | 2.4 | 2.4 | 2.4 | 3.0 | 10 | 17 | 17 | 9.5 | 5.4 |
| 10 | 2.4 | 2.4 | 2.4 | 3.0 | 10 | 17 | 17 | 9.5 | 5.4 |
| 11 | 2.4 | 2.4 | 2.4 | 3.0 | 6.2 | 16 | 17 | 9.5 | 5.4 |
| 12 | 2.4 | 2.4 | 2.4 | 3.0 | 6.2 | 17 | 18 | 9.5 | 5.4 |
| 13 | 2.4 | 2.4 | 2.4 | 3.0 | 6.2 | 17 | 17 | 8.4 | 5.4 |
| 14 | 2.4 | 2.4 | 2.4 | 3.0 | 6.2 | 18 | 17 | 7.3 | 5.4 |
| 15 | 2.4 | 2.4 | 2.4 | 3.0 | 6.2 | 17 | 17 | 7.3 | 5.4 |
| 16 | 2.4 | 2.4 | 2.4 | 3.0 | 6.2 | 17 | 17 | 7.3 | 5.4 |
| 17 | 2.4 | 2.4 | 2.4 | 3.9 | 6.2 | 17 | 17 | 7.3 | 5.4 |
| 18 | 2.4 | 2.4 | 2.4 | 5.0 | 6.2 | 16 | 17 | 8.4 | 5.4 |
| 19 | 2.1 | 2.4 | 2.4 | 6.2 | 7.5 | 17 | 18 | 9.5 | 5.4 |
| 20 | 2.0 | 2.4 | 2.4 | 6.2 | 8.8 | 17 | 17 | 9.5 | 5.4 |
| 21 | 2.0 | 2.4 | 2.4 | 6.2 | 8.8 | 17 | 16 | 9.5 | 5.4 |
| 22 | 2.0 | 2.4 | 2.4 | 6.2 | 8.8 | 17 | 14 | 9.5 | 5.4 |
| 23 | 2.4 | 2.4 | 2.4 | 5.0 | 8.8 | 20 | 14 | 9.5 | 5.4 |
| 24 | 2.4 | 2.4 | 2.4 | 3.9 | 8.8 | 23 | 14 | 9.5 | 5.4 |
| 25 | 2.4 | 2.4 | 2.4 | 3.9 | 8.8 | 23 | 12 | 9.5 | 5.4 |
| 26 | 2.4 | 2.4 | 2.4 | 3.9 | 8.8 | 23 | 12 | 9.5 | 5.4 |
| 27 | 2.4 | 2.4 | 2.4 | 3.9 | 8.8 | 23 | 12 | 8.4 | 4.7 |
| 28 | 2.4 | 2.4 | 2.4 | 5.0 | 8.8 | 23 | 12 | 7.3 | 4.1 |
| 29 | 2.4 | | 2.4 | 6.2 | 12 | 23 | 12 | 7.3 | 4.1 |
| 30 | 2.4 | | 2.4 | 6.2 | 14 | 25 | 11 | 7.3 | 4.1 |
| 31 | 2.4 | | 2.4 | | 14 | | 10 | 7.3 | |

*Daily discharge, in second-feet, of Goodale Creek near Aberdeen, Cal., for 1909–1911*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | [illegible] | 4.1 | 3.7 | 4.2 | 3.1 | 3.2 | 3.1 | 6.9 | 13.5 | 8.4 | 5.6 | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | 4.2 | 3.1 | 3.3 | 3.1 | 6.9 | 13.5 | 7.9 | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | 4.2 | 3.1 | 3.5 | 3.1 | 6.6 | 13.5 | 7.3 | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 3.6 | 3.1 | 6.2 | 13.5 | 6.9 | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 3.8 | 3.1 | 5.9 | 13.5 | 6.4 | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | 3.7 | [illegible] | 3.1 | 4.0 | 3.1 | 5.6 | 13.5 | 6.0 | 5.6 | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 4.2 | 3.1 | 5.6 | 12.9 | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 4.2 | 3.1 | 5.6 | 12.4 | 6.4 | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | 3.3 | 5.6 | 11.8 | 7.3 | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 4.2 | 3.3 | 5.9 | 11.2 | 8.2 | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 4.2 | 3.6 | 6.2 | 12.0 | 9.0 | 4.9 | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 6.6 | 12.7 | 9.0 | 4.6 | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | [illegible] | 6.9 | 13.5 | 9.0 | 4.5 | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | 3.5 | 7.9 | 12.4 | 9.0 | 4.6 | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | 3.6 | 8.9 | 11.3 | 9.0 | 4.6 | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | 3.2 | 3.1 | 4.2 | [illegible] | 10 | 10.2 | 9.0 | 4.3 | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | 4.0 | 9.2 | 9.0 | 9.0 | 4.1 | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | 4.2 | 8.4 | 9.0 | 9.0 | 3.9 | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | 4.0 | 7.7 | 9.0 | 9.0 | 3.7 | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | 4.9 | 8.9 | 9.0 | 9.0 | 3.7 | [illegible] |
| 21 | 4.1 | 4.1 | [illegible] | 3.1 | 3.1 | 4.2 | 5.2 | 7.9 | 9.0 | 9.0 | 3.7 | 3.7 |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 5.9 | 5.6 | 8.9 | 9.0 | 9.0 | 3.7 | 3.7 |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | [illegible] | 6.4 | 10 | 9.0 | 8.4 | 3.7 | 3.7 |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 5.4 | 6.6 | 10 | 9.0 | 7.9 | 3.7 | 3.7 |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 3.1 | 6.9 | 10 | 9.0 | 7.3 | 3.7 | 3.7 |
| 26 | 4.1 | [illegible] | [illegible] | [illegible] | 3.2 | 3.1 | 6.9 | 10 | 9.0 | 7.3 | 3.7 | 3.7 |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 6.9 | 10 | 9.0 | 7.3 | 3.7 | 3.7 |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 3.1 | 6.9 | 10.9 | 9.0 | 7.3 | 3.7 | 3.7 |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | 3.1 | 6.9 | 11.8 | 9.0 | 7.3 | 3.7 | 3.7 |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | 6.9 | 12.6 | 9.0 | 6.7 | 3.7 | 3.7 |
| 31 | 4.1 | ...... | [illegible] | 3.1 | ...... | 3.1 | ...... | 13.5 | ...... | 6.2 | 3.7 | .... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 3.7 | 3.1 | 3.1 | 3.1 | [illegible] | 16 | 3.7 | 3.1 | 3.1 | 3.1 | 3.0 |
| 2 | 3.7 | 3.1 | 3.1 | 3.1 | [illegible] | 17 | 3.7 | 3.1 | 3.1 | 3.1 | 2.9 |
| 3 | 3.7 | 3.1 | 3.1 | 3.1 | [illegible] | 18 | 3.6 | 3.1 | 3.1 | 3.1 | 3.0 |
| 4 | 3.7 | 3.1 | 3.1 | 3.1 | 3.4 | 19 | 3.4 | 3.1 | 3.1 | 3.1 | 3.0 |
| 5 | 3.7 | 3.1 | 3.1 | 3.1 | 3.2 | 20 | 3.3 | 3.1 | 3.1 | 3.1 | 2.7 |
| 6 | 3.7 | 3.1 | 3.1 | 3.1 | 3.1 | 21 | 3.7 | 3.1 | 3.1 | 3.1 | 2.7 |
| 7 | 3.7 | 3.1 | 3.1 | 3.1 | 3.1 | 22 | 3.5 | 3.1 | 3.1 | 3.1 | 2.7 |
| 8 | 3.7 | 3.1 | 3.1 | 3.1 | 3.1 | 23 | 3.3 | 3.1 | 3.1 | 3.1 | 2.7 |
| 9 | 3.7 | 3.1 | 3.1 | 3.1 | 3.1 | 24 | 3.1 | 3.1 | 3.1 | 3.1 | 2.7 |
| 10 | 3.7 | 3.1 | 3.1 | 3.1 | 3.1 | 25 | 3.1 | 3.1 | 3.1 | 3.1 | 2.7 |
| 11 | 3.7 | 3.1 | 3.1 | 3.1 | 3.1 | 26 | 3.1 | 3.1 | 3.1 | 3.1 | 2.7 |
| 12 | 3.7 | 3.1 | 3.1 | 3.1 | 3.1 | 27 | 3.1 | 3.1 | 3.1 | 3.1 | 2.7 |
| 13 | 3.7 | 3.1 | 3.1 | 3.1 | 3.1 | 28 | 3.1 | 3.1 | 3.1 | 4.0 | 2.7 |
| 14 | 3.7 | 3.1 | 3.1 | 3.1 | 3.1 | 29 | 3.1 | 3.1 | 3.1 | 6.0 | ...... |
| 15 | 3.7 | 3.1 | 3.1 | 3.1 | 3.0 | 30 | 3.1 | 3.1 | 3.1 | 7.3 | ...... |
| | | | | | | 31 | 3.1 | ...... | 3.1 | 9.0 | ...... |

NOTE.—Daily discharge determined from rating curve, applicable as follows: Jan. 1 to June 30, 1909; [illegible] to Dec. 31, 1909; Jan. [illegible] to May 30, 1910; May 31, 1910, to Feb. 28, 1911. Discharge interpolated or estimated for days on which the gage was not read.

*Monthly discharge of Goodale Creek near Aberdeen, Cal., for 1906–1911.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| **1906.** | | | | | |
| anuary | | | 2.0 | 123 | |
| ebruary | | | 1.0 | 56 | |
| arch | | | 1.0 | 61 | |
| pril | | | 3.5 | 208 | |
| ay | | | 6.3 | 387 | |
| une | | | 11.2 | 666 | |
| uly | | | 19.0 | 1,170 | |
| ugust | | | 6.4 | 394 | |
| eptember | | | 5.9 | 351 | |
| The period | | | | 3,420 | |
| **1906–7.** | | | | | |
| ctober | 6.3 | 5.4 | 5.6 | 344 | |
| ovember | 5.6 | 5.0 | 5.3 | 315 | |
| ecember | 4.6 | 4.0 | 4.3 | 264 | |
| anuary | 4.0 | 3.4 | 3.9 | 240 | D. |
| ebruary | 4.0 | 3.3 | 3.6 | 200 | D. |
| arch | 5.4 | 3.4 | 3.3 | 203 | D. |
| pril | 7.2 | 2.8 | 5.1 | 304 | C. |
| ay | 9.2 | 5.4 | 7.0 | 430 | C. |
| une | 14 | 7.2 | 10.2 | 607 | C. |
| uly | 18.0 | 12.0 | 15.1 | 928 | C. |
| ugust | 16.0 | 5.5 | 10.3 | 633 | C. |
| eptember | 4.0 | 3.4 | 3.9 | 232 | C. |
| The year | 18.0 | 2.8 | 6.47 | 4,700 | |
| **1907–8.** | | | | | |
| October | 2.8 | 2.8 | 2.8 | 172 | D. |
| November | 2.8 | 2.8 | 2.8 | 167 | D. |
| December | 2.8 | 2.8 | 2.8 | 172 | D. |
| January | 3.0 | 2.6 | 3.0 | 184 | D. |
| February | 2.6 | 2.2 | 2.6 | 150 | D. |
| March | 2.6 | 2.2 | 2.6 | 160 | D. |
| April | 3.0 | 2.2 | 2.7 | 161 | D. |
| May | 4.7 | 3.6 | 4.4 | 270 | D. |
| June | 7.4 | 4.7 | 5.8 | 345 | D. |
| July | 8.3 | 6.4 | 7.3 | 449 | D. |
| August | 8.3 | 3.2 | 5.0 | 307 | D. |
| September | 4.7 | 3.2 | 4.1 | 244 | D. |
| The year | 8.3 | 2.2 | 3.82 | 2,780 | |
| **1908–9.** | | | | | |
| October | 3.4 | 3.3 | 3.3 | 203 | D. |
| November | 3.0 | 3.0 | 3.0 | 179 | D. |
| December | 3.0 | 3.0 | 3.0 | 184 | D. |
| January | 2.4 | 2.0 | 2.34 | 144 | D. |
| February | 2.4 | 2.4 | 2.40 | 133 | C. |
| March | 2.4 | 2.4 | 2.40 | 148 | C. |
| April | 6.2 | 2.4 | 3.83 | 228 | B. |
| May | 14.0 | 6.2 | 8.58 | 528 | B. |
| June | 25.0 | 14.0 | 18.7 | 1,110 | B. |
| July | 27.0 | 10.0 | 16.5 | 1,010 | B. |
| August | 9.5 | 7.3 | 8.83 | 543 | C. |
| September | 7.3 | 4.1 | 5.59 | 333 | B. |
| The year | 27.0 | 2.0 | 6.54 | 4,740 | |
| **1909–10.** | | | | | |
| October | 4.1 | 3.7 | 4.06 | 250 | C. |
| November | 4.1 | 3.7 | 4.02 | 239 | C. |
| December | 12.0 | 3.7 | 4.95 | 304 | B. |
| January | 6.9 | 3.1 | 3.80 | 234 | B. |
| February | 3.1 | 3.1 | 3.10 | 172 | B. |
| March | 4.2 | 3.1 | 3.78 | 232 | B. |
| April | 6.9 | 3.1 | 4.54 | 271 | B. |
| May | 13.5 | 5.6 | 8.02 | 493 | B. |
| June | 13.5 | 9.0 | 10.9 | 649 | B. |
| July | 9.0 | 5.6 | 7.87 | 484 | B. |
| August | 5.6 | 3.7 | 4.49 | 276 | B. |
| September | 3.7 | 3.1 | 3.63 | 216 | B. |
| The year | 13.5 | 3.1 | 5.26 | 3,820 | |
| **1910–11.** | | | | | |
| October | 3.7 | 3.1 | 3.50 | 215 | B. |
| November | 3.1 | 3.1 | 3.10 | 184 | B. |
| December | 3.1 | 3.1 | 3.10 | 191 | B. |
| January | 9.0 | 3.1 | 3.55 | 218 | B. |
| February | 8.5 | 2.7 | 3.24 | 180 | B. |

NOTE.—Daily discharge determined as follows: January to March, 1906, estimated; April to September, 1906, interpolated between discharge measurements; October, 1906, to December, 1908, by the indirect method for shifting channels.

## DIVISION CREEK NEAR INDEPENDENCE, CAL.

This station, which is located at a point about 200 feet above the power intake of the power canal of the Los Angeles Aqueduct, in secs. 4 and 5, T. 12 S., R. 34 E., was originally established January 10, 1906, at a point on the upper road crossing about 1½ miles west of the Hickey ranch house and about 10 miles north of Independence, and was removed to its present site March 3, 1909.

When the upper aqueduct power plant was put into operation in April, 1909, gage-height observations were discontinued on account of the variable amount of water diverted, and discharge measurements were made during periods of steady load.

*Discharge measurements of Division Creek near Independence, Cal., in 1906–1910.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1906. | | *Feet.* | *Sec.-ft.* |
| Jan. [illegible] | G. R. Shuey | | [illegible] |
| Feb. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Mar. [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| Apr. [illegible] | do | | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| 24 | do | | [illegible] |
| May [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| June [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| July [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| 4 | do | 2.65 | [illegible] |
| [illegible] | do | 2.65 | [illegible] |
| Aug. [illegible] | do | [illegible] | [illegible] |
| Oct. [illegible] | do | [illegible] | [illegible] |
| Dec. [illegible] | do | 2.55 | [illegible] |
| 1907. | | | |
| Jan. [illegible] | G. R. Shuey | | 10 |
| Feb. [illegible] | do | [illegible] | [illegible] |
| Mar. [illegible] | do | [illegible] | [illegible] |
| Apr. [illegible] | do | [illegible] | 10 |
| May [illegible] | do | [illegible] | [illegible] |
| June [illegible] | do | [illegible] | 12 |
| [illegible] | do | [illegible] | [illegible] |
| July [illegible] | do | [illegible] | [illegible] |
| Aug. 2 | Shuey and Post | [illegible] | 12 |
| [illegible] | R. B. Post | [illegible] | [illegible] |
| [illegible] | do | [illegible] | 10 |
| Sept. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| Oct. [illegible] | do | [illegible] | [illegible] |
| Nov. [illegible] | do | 2.21 | 10 |
| [illegible] | do | [illegible] | [illegible] |
| Dec. [illegible] | do | [illegible] | [illegible] |
| 1908. | | | |
| Feb. [illegible] | R. B. Post | 1.01 | 7.2 |
| Mar. 13 | do | .91 | [illegible] |

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1908. | | *Feet.* | *Sec.-ft.* |
| Apr. [illegible] | R. B. Post | [illegible] | 5.5 |
| [illegible] | do | [illegible] | 5.7 |
| [illegible] | do | [illegible] | 5.7 |
| May [illegible] | do | .65 | 7.2 |
| June [illegible] | do | .70 | 7.3 |
| July [illegible] | Post and Lamb | .67 | 6.4 |
| [illegible] | W. [illegible] Lamb | [illegible] | [illegible] |
| Aug. [illegible] | do | [illegible] | 7.7 |
| [illegible] | do | .78 | 7.7 |
| Oct. [illegible] | do | [illegible] | 7.3 |
| [illegible] | Lamb and Barrows | .80 | 7.5 |
| Nov. [illegible] | A. F. Barrows | [illegible] | 8.0 |
| 1909. | | | |
| Jan. [illegible] | Haines and Lee | 0.80 | 7.4 |
| Feb. [illegible] | R. E. Haines | .77 | 6.2 |
| 24 | do | .78 | 7.6 |
| Mar. [illegible] | do | .77 | 7.3 |
| Apr. [illegible] | do | | 7.1 |
| 22 | do | | 8.4 |
| May [illegible] | do | | 9.3 |
| June [illegible] | do | | 15.5 |
| 29 | do | | [illegible] |
| July [illegible] | do | | [illegible] |
| Aug. [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| Sept. 20 | do | | 14.0 |
| Oct. 1 | do | | 13.4 |
| Nov. [illegible] | do | | [illegible] |
| [illegible] | do | | [illegible] |
| 1910. | | | |
| Feb. 24 | R. E. Haines | | [illegible] |
| Mar. [illegible] | do | | [illegible] |
| Apr. [illegible] | do | | [illegible] |
| 27 | do | | [illegible] |
| May [illegible] | do | | 9 |
| June [illegible][b] | C. H. Lee | | [illegible] |
| July [illegible][b] | do | | [illegible] |
| Aug. [illegible][b] | Lee and Wood | | [illegible] |
| 25[b] | F. G. Wood | | [illegible] |
| Sept. [illegible] | G. T. Pedersen | | [illegible] |
| Oct. 30[e] | do | | [illegible] |
| Nov. [illegible][e] | do | | 9.[illegible] |
| Dec. 30[e] | do | | [illegible] |
| 1911. | | | |
| Jan. 23 | | | 6.2 |
| Feb. 1 | | | 5.6 |

[a] Owing to change in load at power house 2.6 second-feet had to be added to measurement. The [illegible] second-feet represents normal conditions on this date.
[b] Made at Los Angeles Aqueduct power house No. 2.
[c] Made by wading 300 feet below power plant No. 1; plant running.
[d] Made 500 feet below power plant No. 2; plant running.
[e] Made at road crossing near lower power house; plant running.

*Daily gage height, in feet, of Division Creek near Independence, Cal., for 1906 and 1908.*

| Day. | Aug. | Sept. | Oct. | Nov. | Dec. | Day. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906.[a] | | | | | | 1906. | | | | | |
| 1 | | 1.1 | | | | 16 | | 1.1 | | | 2.5 |
| 2 | | 1.1 | | | 2.5 | 17 | | | | | |
| 3 | | 1.1 | | | | 18 | 1.1 | | | 2.55 | |
| 4 | | 1.1 | | 2.6 | | 19 | 1.1 | | | | |
| 5 | | 1.1 | | | | 20 | 1.1 | | | | |
| 6 | | 1.1 | | | | 21 | 1.1 | | 2.6 | | |
| 7 | | 1.1 | 2.65 | | | 22 | 1.1 | | | | |
| 8 | | 1.1 | | | | 23 | 1.1 | 2.65 | | | 2.5 |
| 9 | | 1.1 | | | 2.55 | 24 | 1.1 | | | | |
| 10 | | 1.1 | | | | 25 | 1.1 | | | 2.4 | |
| 11 | | 1.1 | | 2.6 | | 26 | 1.1 | | | | |
| 12 | | 1.1 | | | | 27 | 1.1 | | | | |
| 13 | | 1.1 | | | | 28 | 1.1 | | 2.6 | | |
| 14 | | 1.1 | 2.62 | | | 29 | 1.1 | | | | |
| 15 | | 1.1 | | | | 30 | 1.1 | 2.65 | | | 2.5 |
| | | | | | | 31 | 1.1 | | 2.6 | | |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | | | | | | | | | |
| 1 | | | | | 0.85 | 0.7 | | | | 0.7 | 0.85 | |
| 2 | | | | | .85 | | 0.65 | | | | .85 | |
| 3 | | | | | .85 | .7 | | 0.75 | 0.75 | | .85 | |
| 4 | | | | | .85 | | .7 | .9 | | .7 | .85 | 0.8 |
| 5 | | 1.0 | | | .85 | .7 | | .75 | | | .85 | |
| 6 | | | | | .85 | | | .75 | .75 | .7 | .85 | .8 |
| 7 | | 1.0 | | | | .7 | .7 | .75 | | | .85 | |
| 8 | | | | | | | | .75 | .75 | .7 | .85 | |
| 9 | | | | | .7 | .7 | | | | | .85 | |
| 10 | | 1.0 | | | .7 | | .7 | .75 | | .7 | .85 | .85 |
| 11 | | 1.0 | | | | .7 | | .75 | .85 | .7 | .85 | |
| 12 | | | | | .7 | | .7 | .75 | | .7 | .85 | |
| 13 | | | | | | .7 | .7 | .75 | .75 | .7 | .85 | .8 |
| 14 | | 1.0 | | | .7 | | | .75 | | .7 | .85 | |
| 15 | | | | | | .7 | | .75 | .75 | .7 | .85 | |
| 16 | | 1.0 | | | .7 | .7 | .7 | | .75 | .7 | .85 | .8 |
| 17 | | 1.0 | | | | | | .75 | | .7 | .85 | .8 |
| 18 | | | | | .7 | | .7 | | | .7 | .85 | |
| 19 | | .95 | | 0.85 | .7 | .7 | | .75 | | .75 | .85 | |
| 20 | | | | .85 | .7 | | .7 | | | .8 | .85 | .8 |
| 21 | | 1.0 | | .85 | .7 | .7 | | .75 | .75 | .8 | .85 | .8 |
| 22 | | | | .85 | | .7 | .65 | | | .8 | .85 | |
| 23 | | | | .85 | .7 | | | | | .8 | .8 | |
| 24 | | | | .85 | | .7 | .7 | .75 | .8 | .8 | .8 | |
| 25 | | | | .85 | .7 | | | | | .85 | | .8 |
| 26 | | 1.0 | | .85 | | .7 | | .75 | .75 | .85 | | |
| 27 | | | | .85 | .7 | | .7 | | | .85 | | |
| 28 | | | | .85 | .7 | | | .75 | .75 | .85 | | .8 |
| 29 | | | | .85 | | .7 | [b].45 | | | .85 | | |
| 30 | | | | .85 | .7 | .65 | .95 | .75 | .75 | .85 | | .8 |
| 31 | | | | | .7 | | | | | .85 | | |

[a] From Aug. 18 to Sept. 18, 1906, the gage record was kept at the ranch house.
[b] Channel changed during cloud-burst July 29, 1908.

*Monthly discharge of Division Creek near Independence, Cal., for 1906–1909.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| **1906.** | | | | | |
| January | | | 6.7 | 412 | |
| February | | | 5.1 | 283 | |
| March | | | 6.1 | 375 | |
| April | | | 6.0 | 357 | |
| May | | | 7.3 | 449 | |
| June | | | 8.4 | 500 | |
| July | | | 17.2 | 1,060 | |
| August | | | 14.3 | 879 | |
| September | 12 | 10 | 10.9 | 649 | |
| The period | | | | 4,960 | |
| **1906–7.** | | | | | |
| October | 14 | 10 | 12.6 | 775 | |
| November | 14 | 8.0 | 11.5 | 684 | |
| December | 11 | 10 | 10.1 | 621 | |
| January | | | 10.6 | 652 | D. |
| February | | | 10.8 | 600 | D. |
| March | | | 11.2 | 689 | D. |
| April | | | 10.1 | 601 | D. |
| May | | | 9.7 | 596 | D. |
| June | | | 11.1 | 660 | D |
| July | | | 12.4 | 762 | D. |
| August | | | 10.1 | 621 | D. |
| September | | | 9.9 | 589 | D. |
| The year | | | 10.8 | 7,850 | |
| **1907–8.** | | | | | |
| October | | | 10.0 | 615 | D. |
| November | | | 9.0 | 536 | D. |
| December | | | 7.7 | 474 | D. |
| January | | | 7.0 | 430 | D. |
| February | 7.2 | 6.0 | 6.7 | 385 | C. |
| March | 5.9 | 5.9 | 5.9 | 363 | C. |
| April | 5.9 | 5.7 | 5.8 | 345 | C. |
| May | 7.2 | 5.7 | 7.0 | 430 | C. |
| June | 7.3 | 6.4 | 7.2 | 428 | C. |
| July | 10.0 | 6.4 | 7.2 | 443 | C. |
| August | 8.0 | 7.7 | 7.7 | 473 | C. |
| September | 7.7 | 7.5 | 7.7 | 458 | C. |
| The year | | | 7.41 | 5,380 | |
| **1908–9.** | | | | | |
| October | 8.0 | 7.3 | 7.5 | 461 | C. |
| November | 8.0 | 7.5 | 7.7 | 458 | C. |
| December | 8.0 | 7.5 | 7.6 | 467 | C. |
| January | | | 7.2 | 443 | C. |
| February | | | 6.9 | 383 | C. |
| March | | | 7.3 | 449 | C. |
| April | | | 7.9 | 470 | C. |
| May | | | 10.0 | 615 | C. |
| June | | | 16.7 | 994 | C. |
| July | | | 16.4 | 1,010 | C. |
| August | | | 15.6 | 959 | C. |
| September | | | 14.8 | 881 | C. |
| The year | | | 10.5 | 7,590 | |
| **1909.** | | | | | |
| October | | | 13.4 | 824 | C. |
| November | | | 11.9 | 708 | C. |
| December | | | 11.2 | 689 | C. |

NOTE.—Discharge Aug. 18 to Dec. 31, 1906, and during 1908, determined by the indirect method for shifting channels. The rest of the record was interpolated between discharge measurements.

### SAWMILL CREEK[1] NEAR INDEPENDENCE, CAL.

This station, which is located at a point on the upper road crossing about 300 feet beyond the Eightmile ranch and about 8 miles north of Independence, in sec. 9, T. 12 S., R. 34 E., and above all diversions, was established September 20, 1906.

The gage was destroyed in the early part of 1907 and was not replaced.

*Discharge measurements of Sawmill Creek near Independence, Cal., in 1906–1910.*

| Date. | Hydrographer. | Discharge. |
|---|---|---|
| 1906. | | *Sec.-ft.* |
| Feb. 15 | G. R. Shuey | 2.7 |
| Mar. 3 | .....do | 2.5 |
| 15 | .....do | 5.0 |
| 27 | .....do | 3.4 |
| Apr. 6 | .....do | 3.0 |
| 18 | .....do | 3.4 |
| 24 | .....do | 4.1 |
| May 2 | .....do | 3.7 |
| 9 | .....do | 4.5 |
| 16 | .....do | 4.4 |
| 23 | .....do | 4.4 |
| June 1 | .....do | 4.6 |
| 19 | .....do | 7.8 |
| 25 | .....do | 9.2 |
| July 7 | .....do | 17 |
| 27 | .....do | 14 |
| Aug. 18 | .....do | 13 |
| Oct. 31[a] | .....do | 5.0 |
| Dec. 8 | .....do | 5.0 |
| 1907. | | |
| Apr. 10 | G. R. Shuey | 3.9 |
| May 5 | .....do | 6.0 |
| June 13 | .....do | 12 |
| Aug. 27 | R. B. Post | 6.6 |
| Oct. 9 | .....do | 6.3 |
| Dec. 2 | .....do | 5.4 |
| 1908. | | |
| Feb. 28 | R. B. Post | 3.9 |
| Mar. 21 | .....do | 4.0 |
| Apr. 3 | .....do | 4.6 |
| May 1 | .....do | 3.9 |
| June 13 | .....do | 3.1 |
| 26 | .....do | 3.8 |
| July 9 | .....do | 4.9 |
| July 31 | W. A. Lamb | 5.9 |
| Aug. 12 | .....do | 5.1 |
| 1908. | | *Sec.-ft.* |
| Aug. 24 | W. A. Lamb | 5.8 |
| Sept. 14 | .....do | 3.5 |
| Nov. 5 | A. T. Barrows | 5.4 |
| 1909. | | |
| Jan. 20 | Haines and Lee | 4.0 |
| Feb. 4 | R. E. Haines | 4.8 |
| 23 | .....do | 5.2 |
| Mar. 11 | .....do | 4.8 |
| Apr. 2 | .....do | 5.6 |
| 22 | .....do | 7.2 |
| May 14 | .....do | 7.1 |
| June 2 | .....do | 7.9 |
| 24 | .....do | 18.8 |
| July 13 | .....do | 19.2 |
| Aug. 3 | .....do | 13.8 |
| 25 | .....do | 12.5 |
| Sept. 10 | .....do | 10.6 |
| 29 | .....do | 10.2 |
| Oct. 26 | .....do | 8.2 |
| Nov. 18 | .....do | 8.8 |
| 1910. | | |
| Feb. 24[b] | R. E. Haines | 6.1 |
| Mar. 16 | .....do | 6.6 |
| Apr. 6[b] | .....do | 4.5 |
| 27 | .....do | 5.7 |
| May 18 | .....do | 5.5 |
| July 14 | F. G. Wood | 5.8 |
| Aug. 12 | .....do | 4.2 |
| Sept. 6 | .....do | 4.9 |
| Oct. 10[c] | G. T. Peekema | 4.6 |
| Nov. 11[d] | .....do | 5.0 |
| Dec. 9[d] | .....do | 4.2 |
| 30[d] | .....do | 4.3 |
| 1911. | | |
| Feb. 1 | ........................ | 9.0 |

[a] Gage height 0.40 foot at regular station.
[b] Made near mouth of canyon.
[c] Made ½ mile below mouth of canyon.
[d] Made 2 miles above Eightmile ranch.

*Monthly discharge of Sawmill Creek near Independence, Cal., for 1906.*

| Month. | Discharge in second-feet (mean). | Run-off (total in acre-feet). |
|---|---|---|
| 1906. | | |
| January | [a] 3.0 | 184 |
| February | 2.7 | 150 |
| March | 3.7 | 228 |
| April | 3.4 | 202 |
| May | 4.3 | 264 |
| June | 7.6 | 452 |
| July | 16.3 | 1,000 |
| August | 12.6 | 775 |
| September | 9.8 | 583 |
| October | 6.7 | 412 |
| November | [a] 5.0 | 298 |
| December | [a] 5.0 | 307 |
| The year | 6.7 | 4,860 |

[a] Estimated.

NOTE.—The daily discharge, February to October, was obtained by interpolation between measurements. Values are approximate.

[1] Called Eightmile Creek in the 1906 report.

*Monthly discharge of Sawmill Creek near Independence, Cal., for 1908.*

| Month. | Discharge in second-feet (mean). | Run-off (total in acre-feet). | Accuracy. | Month. | Discharge in second-feet (mean). | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|---|---|
| 1908. | | | | 1908. | | | |
| January | [illegible] | 252 | C. | August | 13.[illegible] | [illegible] | C. |
| February | [illegible] | 273 | C. | September | 10.4 | [illegible] | C. |
| March | 4.9 | 301 | C. | October | [illegible] | [illegible] | C. |
| April | 6.6 | 393 | C. | November | [illegible] | 518 | C. |
| May | 7.3 | 449 | C. | December | [illegible] | [illegible] | [illegible] |
| June | 14.1 | 839 | C. | | | | |
| July | 17.8 | 1,090 | C. | The year | [illegible] | [illegible] | |

NOTE.—This creek is one of the most uniform in flow in the Owens Valley, and the mean discharges have been obtained by interpolating between the [?] measurements made in 1909.

## THIBAUT CREEK NEAR INDEPENDENCE, CAL.

A regular station was established on this creek February 13, 1908, at a point about 1 mile west of the county road between Independence and Big Pine and about 5 miles north of Independence. No gage record has been kept.

*Discharge measurements of Thibaut Creek near Independence, Cal., in 1907–1909.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1907. | | Feet. | Sec-ft. | 1908. | | Feet. | Sec-ft. |
| May 6 | G. R. Shuey | | 1.7 | July 31 | W. A. Lamb | 0.39 | [illegible] |
| 24 | do | | 1.7 | Aug. 12 | do | .40 | [illegible] |
| June 28 | do | | 1.2 | | | | |
| Aug. 31 | R. B. Post | | .9 | 1909. | | | |
| Dec. 2 | do | | .9 | Apr. [illegible] | | | [illegible] |
| | | | | June [illegible] | | | [illegible] |
| 1908. | | | | 24 | | | [illegible] |
| Feb. 13 | R. B. Post | 0.25 | [illegible] | July 13 | | | [illegible] |
| Apr. 3 | do | .33 | 1.0 | Aug. [illegible] | | | [illegible] |
| May 6 | do | | [illegible] | 25 | | | [illegible] |
| July 8 | do | .29 | [illegible] | Oct. 27 | | | [illegible] |

## OAK CREEK NEAR INDEPENDENCE, CAL.

This station, which was located above and about three-fourths of a mile west of Bell's flour mill in sec. 2, T. 13 S., R. 34 E., was originally established June 15, 1905, about 1 mile west of Old Fort Independence. On October 1, 1906, the station was removed to Bell's flour mill, about 3 miles northwest of Independence; this site was in turn abandoned in favor of the one farther west on April 19, 1907, and the station was discontinued February 28, 1911.

No water is diverted above or near the station. The drainage area above the mouth of the canyon is approximately 15.4 square miles.

The gage is a vertical staff on the right bank.

Discharge measurements were made from the footbridge at the gage.

The channel is composed of sand and gravel, and shifts somewhat.

*Discharge measurements of Oak Creek near Independence, Cal., in 1905–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1905. | | *Feet.* | *Sec.-ft.* |
| June 15 | J. S. Evans | 1.10 | 32 |
| July 17 | ....do | .63 | 17.6 |
| Aug. 23 | ....do | .30 | 11.7 |
| Nov. 8 | F. R. S. Buttemer | .35 | 11 |
| Dec. 4 | ....do | .25 | 5.8 |
| 1906. | | | |
| Feb. 14 | G. R. Shuey | .20 | 7.7 |
| 21 | ....do | .20 | 7.1 |
| Mar. 3 | ....do | ........ | 7.5 |
| 10 | ....do | ........ | 7.5 |
| 20 | ....do | ........ | 7.5 |
| 27 | ....do | ........ | 8.9 |
| Apr. 6 | ....do | ........ | 8.5 |
| 12 | ....do | .30 | 10 |
| 21 | ....do | .50 | 14 |
| 24 | ....do | .50 | 17 |
| May 2 | ....do | .44 | 14 |
| 9 | ....do | .90 | 26 |
| 14 | ....do | .98 | 27 |
| 23 | ....do | 1.08 | 34 |
| June 3 | ....do | 1.08 | 36 |
| 16 | ....do | ........ | 60 |
| 23 | ....do | ........ | 93 |
| July 7 | ....do | ........ | 162 |
| 14 | ....do | ........ | 143 |
| 27 | ....do | ........ | 132 |
| Aug. 9 | ....do | ........ | 77 |
| 20 | ....do | ........ | 68 |
| Sept. 23 | ....do | ........ | 21 |
| Oct. 20 | ....do | .35 | 17 |
| Nov. 19 | ....do | .30 | 12.4 |
| Dec. 21 | ....do | .25 | 10.6 |
| 1907. | | | |
| Jan. 21 | G. R. Shuey | .23 | 9.6 |
| Feb. 24 | ....do | .23 | 12 |
| Mar. 19 | ....do | .31 | 20 |
| Apr. 11 | ....do | .29 | 15 |
| 19 | ....do | .50 | 23 |
| May 24 | ....do | .58 | 28 |
| June 14 | ....do | .60 | 31 |
| 28 | ....do | .80 | 54 |
| July 10 | ....do | .80 | 58 |
| Aug. 2 | Shuey and Post | .76 | 52 |
| 15 | R. B. Post | .63 | 32 |
| 31 | ....do | .54 | 25 |
| Sept. 9 | ....do | .45 | 18 |
| Oct. 9 | ....do | .41 | 14 |
| 31 | ....do | .40 | 14 |
| Nov. 19 | ....do | .44 | 15 |
| 26 | ....do | .40 | 12 |
| 1908. | | | |
| Feb. 8 | R. B. Post | .31 | 8.4 |
| Mar. 24 | R. B. Post | 0.35 | 9.9 |
| Apr. 11 | ....do | .32 | 9.9 |
| 22 | ....do | .43 | 15 |
| May 4 | ....do | .44 | 15 |
| 30 | ....do | .44 | 16 |
| June 11 | ....do | .49 | 20 |
| 24 | ....do | .53 | 23 |
| July 1 | ....do | .58 | 22 |
| 11 | ....do | .63 | 30 |
| 28 | W. A. Lamb | .60 | 28 |
| Aug. 11 | ....do | .59 | 29 |
| 31 | ....do | .37 | 13 |
| Sept. 22 | ....do | .37 | 13 |
| Oct. 14 | ....do | .34 | 12 |
| 26 | A. T. Barrows | .32 | 13 |
| Nov. 2 | ....do | .34 | 12 |
| 14 | ....do | .32 | 11 |
| 1909. | | | |
| Jan. 16 | Haines and Lee | .37 | 10.9 |
| Feb. 4 | R. E. Haines | .34 | 10.7 |
| 23 | ....do | .32 | 9.7 |
| Mar. 10 | ....do | .32 | 9.8 |
| 31 | ....do | .30 | 9.2 |
| Apr. 23 | ....do | .42 | 15.7 |
| May 13 | ....do | .60 | 29.6 |
| June 4 | ....do | 1.00 | 89.2 |
| 23 | ....do | .95 | 79.8 |
| July 15 | ....do | 1.10 | 94.3 |
| Aug. 3 | ....do | .94 | 34.4 |
| 25 | ....do | .89 | 30.3 |
| Sept. 10 | ....do | .76 | 20.9 |
| 29 | ....do | .70 | 15.5 |
| Oct. 26 | ....do | .69 | 15.1 |
| Nov. 17 | ....do | .68 | 13.8 |
| 1910. | | | |
| Feb. 26 | R. E. Haines | .61 | 11 |
| Mar. 17 | ....do | .61 | 11 |
| Apr. 7 | ....do | .64 | 11 |
| 28 | ....do | .84 | 24 |
| May 19 | ....do | .85 | 25 |
| June 22 | C. H. Lee | .88 | 26 |
| July 14 | ....do | .83 | 23 |
| 19 | ....do | 1.03 | 40 |
| Aug. 8 | ....do | .71 | 14 |
| Sept. 7 | F. G. Wood | .61 | 11 |
| 28 | G. T. Peekema | .57 | 7.6 |
| Oct. 12 | ....do | .60 | 8.7 |
| Nov. 10 | ....do | .58 | 7.2 |
| Dec. 8 | ....do | .58 | 8 |
| 1911. | | | |
| Jan. 20 | G. T. Peekema | .59 | 7.2 |
| Feb. 17 | C. H. Lee | .60 | 8.3 |

*Daily gage height, in feet, of Oak Creek near Independence, Cal., for 1905 and 1906–1911.*

| Day. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|
| 1 | ...... | 1.0 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 |
| 2 | ...... | 1.0 | .5 | .4 | .3 | .3 | .3 |
| 3 | ...... | 1.0 | .5 | .4 | .3 | .3 | .25 |
| 4 | ...... | .9 | .5 | .4 | .3 | .3 | .25 |
| 5 | ...... | 1.0 | .5 | .4 | .2 | .3 | .3 |
| 6 | ...... | 1.0 | .5 | .3 | .2 | .4 | .3 |
| 7 | ...... | 1.0 | .5 | .3 | .2 | .4 | .25 |
| 8 | ...... | 1.0 | 5 | .3 | .3 | .3 | .25 |
| 9 | ...... | 1.0 | .5 | .3 | .3 | .4 | .25 |
| 10 | ...... | 1.1 | .5 | .3 | .3 | .3 | .25 |
| 11 | ...... | 1.1 | .5 | .3 | .3 | .3 | .25 |
| 12 | ...... | 1.1 | .5 | .3 | .3 | .3 | .25 |
| 13 | ...... | 1.0 | .5 | .3 | .3 | .3 | .3 |
| 14 | ...... | .9 | .4 | .3 | .2 | .3 | .3 |
| 15 | ...... | .9 | .4 | .3 | .3 | .3 | .3 |
| 16 | ...... | 0.8 | 0.4 | 0.2 | 0.2 | 0.3 | 0.3 |
| 17 | ...... | .8 | .4 | .2 | .2 | .3 | .25 |
| 18 | 1.3 | .7 | .4 | .2 | .3 | .3 | .25 |
| 19 | 1.3 | .7 | .4 | .2 | .3 | .3 | .25 |
| 20 | 1.3 | .6 | .4 | .2 | .3 | .3 | .25 |
| 21 | 1.4 | .7 | .4 | .2 | .3 | .3 | .25 |
| 22 | 1.2 | .6 | .4 | .2 | .3 | .3 | .25 |
| 23 | 1.2 | .6 | .4 | .2 | .3 | .3 | .25 |
| 24 | 1.1 | .7 | .4 | .2 | .3 | .3 | .25 |
| 25 | 1.0 | .7 | .4 | .2 | .3 | .3 | .25 |
| 26 | 1.0 | .7 | .4 | .2 | .3 | .3 | .25 |
| 27 | 1.0 | .7 | .4 | .2 | .3 | .3 | .25 |
| 28 | .9 | .7 | .4 | .2 | .3 | .3 | .25 |
| 29 | 1.0 | .6 | .4 | .2 | .3 | .3 | .25 |
| 30 | 1.0 | .6 | .4 | .3 | .3 | .3 | .25 |
| 31 | ...... | .6 | .4 | ...... | .3 | ...... | .25 |

NOTE.—Station discontinued Dec. 31, 1905, and a new station established Oct. 1, 1906.

*Daily gage height, in feet, of Oak Creek near Independence, Cal., for 1905 and 1906–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1906–7.** | | | | | | | | | | | | |
| 1 | 0.4 | 0.3 | 0.2 | 0.2 | 0.25 | 0.2 | 0.25 | 0.5 | ...... | ...... | ...... | ...... |
| 2 | .4 | .3 | .25 | .2 | .25 | .2 | .25 | ...... | ...... | 0.8 | 0.7 | 0.55 |
| 3 | .4 | .3 | .3 | .2 | .25 | .2 | .25 | .5 | 0.8 | .9 | ...... | ...... |
| 4 | .41 | .3 | .3 | .2 | .25 | .2 | .25 | ...... | .8 | 1.0 | ...... | .55 |
| 5 | .42 | .3 | .3 | .2 | .25 | .2 | .25 | ...... | ...... | 1.0 | .7 | ...... |
| 6 | .4 | .3 | .3 | .2 | .25 | .25 | .25 | .5 | .75 | ...... | ...... | .5 |
| 7 | .4 | .3 | .3 | .25 | .25 | .3 | .25 | ...... | .7 | ...... | .6 | ...... |
| 8 | .4 | .3 | .3 | .25 | .25 | .25 | .25 | .5 | ...... | .9 | ...... | .5 |
| 9 | .4 | .3 | .3 | .25 | .25 | .25 | .25 | ...... | .65 | ...... | .6 | ...... |
| 10 | .4 | .3 | .3 | .25 | .25 | .25 | .25 | ...... | ...... | .8 | ...... | ...... |
| 11 | .4 | .3 | .3 | .25 | .25 | .25 | .3 | .55 | ...... | .8 | .6 | .45 |
| 12 | .4 | .3 | .3 | .25 | .2 | .25 | .3 | ...... | ...... | ...... | ...... | ...... |
| 13 | .4 | .3 | .3 | .25 | .2 | .25 | .35 | .5 | .65 | .85 | .6 | ...... |
| 14 | .4 | .3 | .3 | .25 | .2 | .25 | .4 | ...... | ...... | .85 | .65 | .45 |
| 15 | .4 | .3 | .3 | .25 | .2 | .25 | .4 | .5 | .6 | ...... | .65 | ...... |
| 16 | .39 | .3 | .3 | .25 | .2 | .25 | .4 | ...... | ...... | .8 | ...... | .45 |
| 17 | .39 | .3 | .25 | .25 | .2 | .3 | .4 | .55 | .6 | .8 | ...... | ...... |
| 18 | .38 | .3 | .25 | .25 | .2 | .3 | .4 | .6 | .55 | ...... | ...... | .47 |
| 19 | .38 | .3 | .25 | .25 | .2 | .35 | .4 | ...... | ...... | .8 | .5 | ...... |
| 20 | .35 | .3 | .25 | .25 | .2 | .35 | .4 | .6 | ...... | ...... | ...... | .45 |
| 21 | .35 | .3 | .25 | .25 | .2 | .3 | ...... | ...... | .7 | .8 | .5 | ...... |
| 22 | .35 | .3 | .2 | .25 | .2 | .3 | *a*.55 | .6 | .7 | ...... | ...... | ...... |
| 23 | .37 | .25 | .25 | .25 | .2 | .3 | ...... | ...... | ...... | .7 | .55 | .45 |
| 24 | .36 | .25 | .25 | .25 | .2 | .3 | .55 | .6 | .6 | ...... | ...... | .45 |
| 25 | .36 | .25 | .25 | .25 | .2 | .3 | ...... | .6 | .6 | .7 | ...... | .45 |
| 26 | .36 | .25 | .25 | .25 | .2 | .3 | ...... | ...... | ...... | ...... | .55 | ...... |
| 27 | .35 | .2 | .25 | .25 | .2 | .3 | .6 | .6 | .8 | .7 | ...... | .45 |
| 28 | .35 | .2 | .25 | .25 | .2 | .25 | ...... | .6 | .8 | ...... | .55 | ...... |
| 29 | .3 | .2 | .25 | .25 | ...... | .25 | .55 | ...... | ...... | .7 | ...... | ...... |
| 30 | .3 | .2 | .2 | .25 | ...... | .25 | ...... | .65 | .9 | ...... | ...... | .45 |
| 31 | .3 | ...... | .2 | .25 | ...... | .25 | ...... | .7 | ...... | .7 | .55 | ...... |
| **1907–8.** | | | | | | | | | | | | |
| 1 | ...... | ...... | ...... | .3 | ...... | ...... | ...... | ...... | .45 | ...... | ...... | .4 |
| 2 | .45 | .4 | .4 | ...... | .35 | .3 | .3 | .5 | .45 | .6 | .6 | ...... |
| 3 | ...... | ...... | ...... | .3 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | .35 |
| 4 | .45 | ...... | .4 | ...... | .35 | ...... | .35 | .5 | ...... | .65 | .6 | ...... |
| 5 | ...... | .4 | ...... | .3 | ...... | .35 | ...... | ...... | .45 | ...... | ...... | ...... |
| 6 | ...... | ...... | .4 | ...... | ...... | .35 | .35 | .45 | ...... | .65 | .6 | .4 |
| 7 | .45 | .4 | ...... | .3 | .35 | ...... | ...... | .4 | .45 | ...... | ...... | ...... |
| 8 | ...... | ...... | .4 | ...... | .3 | ...... | .35 | ...... | ...... | .65 | .6 | .4 |
| 9 | .4 | .4 | ...... | .3 | ...... | ...... | ...... | .4 | .5 | ...... | ...... | ...... |
| 10 | ...... | ...... | .4 | ...... | .3 | .3 | .35 | ...... | ...... | .65 | .6 | .4 |
| 11 | .4 | .4 | ...... | .3 | ...... | ...... | .3 | ...... | .5 | ...... | ...... | ...... |
| 12 | .4 | ...... | ...... | ...... | .3 | .3 | ...... | .4 | ...... | .65 | .55 | .45 |
| 13 | ...... | .4 | .4 | ...... | ...... | ...... | .35 | ...... | .55 | ...... | ...... | ...... |
| 14 | .4 | ...... | ...... | .3 | ...... | .3 | .35 | .4 | .55 | .6 | ...... | .5 |
| 15 | ...... | .4 | .4 | ...... | .3 | ...... | .4 | ...... | ...... | ...... | .55 | ...... |
| 16 | .4 | ...... | ...... | .3 | ...... | .3 | ...... | .4 | .55 | .6 | ...... | [illegible] |
| 17 | .4 | .4 | .4 | ...... | .3 | ...... | .4 | .4 | ...... | ...... | .5 | .4 |
| 18 | ...... | ...... | ...... | .3 | ...... | .3 | ...... | ...... | .5 | .6 | .5 | ...... |
| 19 | .4 | .4 | .4 | .3 | .3 | ...... | .4 | .4 | ...... | ...... | ...... | .4 |
| 20 | .4 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | .5 | .6 | .5 | ...... |
| 21 | ...... | .4 | .4 | ...... | ...... | .3 | .4 | .4 | .55 | ...... | ...... | .4 |
| 22 | .4 | ...... | .4 | .3 | .35 | .35 | ...... | ...... | ...... | .6 | .5 | ...... |
| 23 | ...... | .4 | ...... | ...... | ...... | ...... | .4 | .4 | .55 | ...... | .5 | .4 |
| 24 | ...... | ...... | .4 | .3 | .3 | .35 | ...... | .45 | ...... | .6 | ...... | .4 |
| 25 | .45 | .4 | ...... | ...... | ...... | ...... | .4 | ...... | .6 | ...... | .45 | ...... |
| 26 | .45 | ...... | .4 | ...... | .3 | ...... | ...... | .5 | ...... | .6 | ...... | .4 |
| 27 | ...... | .4 | ...... | .3 | ...... | .35 | .45 | ...... | ...... | ...... | .45 | ...... |
| 28 | .4 | ...... | .4 | ...... | ...... | ...... | ...... | .5 | .6 | .6 | ...... | .4 |
| 29 | ...... | .4 | ...... | .35 | .3 | .35 | .45 | ...... | ...... | ...... | .4 | ...... |
| 30 | .4 | ...... | .4 | ...... | ...... | ...... | .5 | ...... | .6 | .6 | .4 | .4 |
| 31 | ...... | ...... | ...... | .35 | ...... | .35 | ...... | ...... | ...... | .6 | ...... | ...... |
| **1908–9.** | | | | | | | | | | | | |
| 1 | ...... | .35 | .35 | ...... | ...... | .35 | .35 | ...... | ...... | ...... | 1.0 | .85 |
| 2 | .4 | ...... | ...... | ...... | .3 | ...... | ...... | .6 | 1.0 | 1.6 | ...... | ...... |
| 3 | ...... | ...... | .3 | .3 | ...... | ...... | .35 | ...... | ...... | 1.7 | .95 | ...... |
| 4 | .4 | .35 | .3 | ...... | .3 | .35 | .35 | ...... | 1.0 | 1.7 | 1.0 | .85 |
| 5 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | .7 | .95 | ...... | ...... | ...... |
| 6 | .35 | .35 | .3 | .3 | .35 | .35 | .35 | ...... | .95 | ...... | ...... | .85 |
| 7 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | .7 | ...... | 1.4 | 1.0 | ...... |
| 8 | .35 | .35 | .3 | .3 | .35 | ...... | ...... | .7 | .9 | ...... | 1.0 | .8 |
| 9 | ...... | ...... | .3 | ...... | ...... | .35 | .35 | ...... | ...... | 1.3 | ...... | ...... |
| 10 | .35 | .35 | ...... | .3 | .35 | .30 | ...... | .65 | .95 | ...... | 1.0 | .75 |

*a* New station.

*Daily gage height, in feet, of Oak Creek near Independence, Cal., for 1905 and 1906–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 11 | 0.35 | | | | | 0.35 | 0.35 | 0.65 | | 1.3 | | |
| 12 | | 0.35 | 0.3 | 0.4 | 0.35 | | | | | | 1.0 | 0.75 |
| 13 | .4 | .3 | | | | .35 | .4 | .6 | 1.0 | 1.3 | | |
| 14 | | | .3 | .5 | .35 | | | | | | 1.0 | .75 |
| 15 | .35 | .3 | | | | .35 | .4 | .6 | 1.0 | 1.3 | 1.0 | |
| 16 | | .3 | .3 | .35 | .35 | | | | | | | .75 |
| 17 | .35 | | | .35 | | .35 | .45 | .55 | 1.0 | | .95 | |
| 18 | .35 | .3 | .3 | | .35 | | | | | 1.3 | | |
| 19 | | | | .4 | | .35 | .5 | .55 | 1.0 | | | .7 |
| 20 | .35 | .3 | .3 | .4 | .35 | | | | | | .95 | |
| 21 | | | | | | .35 | .5 | | 1.0 | 1.3 | | 7. |
| 22 | .35 | .3 | .3 | .4 | .35 | | | .6 | | | .9 | |
| 23 | | | | | .30 | | .4 | | .95 | 1.2 | | |
| 24 | .35 | .3 | .3 | .35 | .35 | .35 | .5 | | 1.2 | | .9 | .7 |
| 25 | | | | | | | .45 | .65 | | 1.2 | .9 | |
| 26 | .35 | .35 | | | .35 | .35 | | | 1.3 | | | .7 |
| 27 | | | .3 | .35 | | | .5 | .75 | 1.4 | | .9 | |
| 28 | | .35 | | | .35 | .35 | | | | 1.0 | | .7 |
| 29 | .35 | | .3 | .35 | | | .55 | .75 | 1.4 | | .9 | .7 |
| 30 | | .35 | | | | | .6 | | | 1.0 | | .7 |
| 31 | .35 | | .3 | .3 | | .30 | | | | | .85 | |
| 1909–10. | | | | | | | | | | | | |
| 1 | | .7 | .7 | | | | | | 1.08 | | | .62 |
| 2 | | | | | .65 | .6 | .63 | | | .90 | .80 | |
| 3 | .7 | | | .65 | | | | .80 | | | | .62 |
| 4 | | .7 | | | .65 | .6 | .63 | | 1.02 | | .79 | |
| 5 | | | .7 | .65 | | | .63 | .75 | | .89 | | .61 |
| 6 | .7 | .7 | | | .65 | .65 | | | .92 | | .75 | |
| 7 | | .7 | .7 | .65 | | | .65 | .78 | | .90 | | .60 |
| 8 | | | | | | | | .79 | | | .71 | |
| 9 | .7 | .7 | | .65 | .65 | .65 | .68 | | .95 | .82 | | .59 |
| 10 | .7 | | .7 | | | | | .87 | | | .70 | |
| 11 | | | | .65 | .65 | .65 | .70 | | .98 | | | |
| 12 | .7 | .7 | .7 | | | | | .83 | | .89 | .70 | .58 |
| 13 | | | | | .65 | | | | | | | |
| 14 | | .7 | | .65 | | .65 | .70 | | .98 | | .69 | .58 |
| 15 | .65 | | .7 | | .6 | | | .90 | | .82 | | |
| 16 | | | | .65 | | .63 | .70 | | .95 | | | .60 |
| 17 | .65 | .7 | .7 | | | .61 | | .87 | .90 | .87 | .68 | |
| 18 | | | | .65 | .6 | .65 | .71 | | | 1.15 | | |
| 19 | | | .65 | | | | | .87 | | | .65 | .60 |
| 20 | .7 | .7 | | | .6 | .65 | .73 | | | 1.06 | | |
| 21 | | | .65 | .65 | | | | .90 | .85 | | | .59 |
| 22 | | | | | | | .73 | | .88 | | .67 | |
| 23 | .7 | .7 | | .65 | .6 | .65 | | | .87 | | | .60 |
| 24 | | | .65 | | | | .75 | .93 | | .90 | .65 | |
| 25 | .7 | | | | .6 | | | .90 | .85 | | | |
| 26 | .7 | .7 | | .65 | .61 | .65 | .82 | | .85 | .85 | .65 | .58 |
| 27 | .7 | | .65 | | .6 | | | .96 | | | | |
| 28 | | .7 | | | | .65 | .84 | | | .84 | | .60 |
| 29 | .7 | | .65 | .65 | | | .82 | 1.00 | .85 | | | |
| 30 | .7 | .7 | | | | .65 | | | | .82 | .64 | .58 |
| 31 | | | | .65 | | | | 1.06 | | | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | | 0.6 | | | | 16 | 0.6 | | | 0.58 | |
| 2 | | | | 0.58 | 0.62 | 17 | | 0.58 | 0.52 | | |
| 3 | | .58 | 0.6 | | | 18 | .58 | | | .56 | 0.60 |
| 4 | 0.56 | | | .55 | .60 | 19 | | .6 | .56 | | |
| 5 | | .6 | .6 | | | 20 | | | | | .58 |
| 6 | .55 | | | | .62 | 21 | .58 | .59 | .52 | .59 | |
| 7 | | | .57 | .55 | | 22 | | | | | .58 |
| 8 | .58 | .6 | | | .60 | 23 | .58 | .55 | | .59 | |
| 9 | | | | | | 24 | | | .57 | | .58 |
| 10 | | .58 | .6 | .60 | | 25 | .6 | | | .56 | |
| 11 | .59 | | | | .60 | 26 | | .58 | | | |
| 12 | | .6 | .58 | .58 | | 27 | .59 | | .58 | | .57 |
| 13 | .6 | | | | .60 | 28 | | .59 | | .60 | |
| 14 | | | .54 | .56 | | 29 | | | .55 | | |
| 15 | .62 | .6 | | | .59 | 30 | .58 | .56 | | | |
| | | | | | | 31 | | | .6 | .78 | |

*Daily discharge, in second-feet, of Oak Creek near Independence, Cal., for 1909–1911*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 8.8 | 8.8 | 11 | 11 | 30 | 79 | 280 | 45 | 27 |
| 2 | 8.8 | 8.8 | 11 | 11 | 30 | 89 | 213 | 42 | 27 |
| 3 | 8.8 | 8.8 | 11 | 11 | 34 | 89 | 234 | 38 | 27 |
| 4 | 8.8 | 8.8 | 11 | 11 | 38 | 89 | 234 | 45 | 27 |
| 5 | 8.8 | 10 | 11 | 11 | 42 | 89 | 206 | 45 | 27 |
| 6 | 8.8 | 11 | 11 | 11 | 42 | 89 | 182 | 45 | 27 |
| 7 | 8.8 | 11 | 11 | 11 | 42 | 76 | 157 | 45 | 24 |
| 8 | 8.8 | 11 | 11 | 11 | 42 | 72 | 146 | 45 | 22 |
| 9 | 8.8 | 11 | 11 | 11 | 39 | 76 | 135 | 45 | 20 |
| 10 | 8.8 | 11 | 8.8 | 11 | 38 | 90 | 135 | 45 | 18 |
| 11 | 12 | 11 | 11 | 11 | 38 | 88 | 135 | 45 | 18 |
| 12 | 14 | 11 | 11 | 12 | 33 | 88 | 135 | 45 | 18 |
| 13 | 17 | 11 | 11 | 14 | 30 | 90 | 135 | 45 | 18 |
| 14 | 20 | 11 | 11 | 14 | 30 | 89 | 135 | 45 | 18 |
| 15 | 16 | 11 | 11 | 14 | 30 | 89 | 135 | 45 | 18 |
| 16 | 11 | 11 | 11 | 13 | 28 | 89 | 135 | 42 | 18 |
| 17 | 11 | 11 | 11 | 12 | 25 | 89 | 135 | 38 | 17 |
| 18 | 12 | 11 | 11 | 16 | 23 | 90 | 135 | 38 | 16 |
| 19 | 14 | 11 | 11 | 20 | 25 | 89 | 135 | 38 | 15 |
| 20 | 14 | 11 | 11 | 20 | 26 | 89 | 135 | 38 | 15 |
| 21 | 14 | 11 | 11 | 20 | 28 | 89 | 135 | 35 | 15 |
| 22 | 14 | 11 | 11 | 17 | 30 | 84 | 118 | 32 | 15 |
| 23 | 12 | 10 | 11 | 14 | 32 | 89 | 109 | 32 | 15 |
| 24 | 11 | 11 | 11 | 20 | 34 | 128 | 109 | 32 | 15 |
| 25 | 11 | 11 | 11 | 12 | 36 | 128 | 109 | 32 | 15 |
| 26 | 11 | 11 | 11 | 16 | 42 | 148 | 92 | 32 | 15 |
| 27 | 11 | 11 | 11 | 20 | 49 | 169 | 64 | 32 | 15 |
| 28 | 11 | 11 | 11 | 22 | 49 | 169 | 45 | 32 | 15 |
| 29 | 11 | ........ | 10 | 25 | 49 | 169 | 46 | 32 | 15 |
| 30 | 9.9 | ........ | 9 | 30 | 59 | 184 | 46 | 30 | 15 |
| 31 | 8.8 | ........ | 8.8 | ...... | 60 | ........ | 45 | 27 | ....... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 15 | 15 | 15 | 12.2 | 12.2 | 10 | 11.7 | 22 | 58 | 28 | 22 | 9.7 |
| 2 | 15 | 15 | 15 | 12.2 | 12.2 | 10 | 11.4 | 21 | 55 | 30 | 21 | 9.7 |
| 3 | 15 | 15 | 15 | 12.2 | 12.2 | 10 | 11.4 | 21 | 51 | 30 | 20 | 9.7 |
| 4 | 15 | 15 | 15 | 12.2 | 12.2 | 10 | 11.4 | 19 | 48 | 29 | 20.3 | 9.4 |
| 5 | 15 | 15 | 15 | 12.2 | 12.2 | 11.1 | 11.4 | 17.4 | 49 | 29 | 18 | 9.2 |
| 6 | 15 | 15 | 15 | 12.2 | 12.2 | 12.2 | 11.8 | 18 | 33 | 29 | 17 | 9.0 |
| 7 | 15 | 15 | 15 | 12.2 | 12.2 | 12.2 | 12.2 | 19.6 | 34 | 30 | 16 | 8.7 |
| 8 | 15 | 15 | 15 | 12.2 | 12.2 | 12.2 | 12.9 | 20.3 | 36 | 27 | 14.6 | 8.5 |
| 9 | 15 | 15 | 15 | 12.2 | 12.2 | 12.2 | 13.6 | 24 | 37 | 23 | 14.2 | 8.3 |
| 10 | 15 | 15 | 15 | 12.2 | 12.2 | 12.2 | 14.0 | 27 | 39 | 25 | 13.9 | 8.2 |
| 11 | 15 | 15 | 15 | 12.2 | 12.2 | 12.2 | 14.5 | 26 | 41 | 27 | 13.9 | 8.1 |
| 12 | 15 | 15 | 15 | 12.2 | 12.2 | 12.2 | 14.5 | 24 | 41 | 29 | 13.9 | 7.9 |
| 13 | 14 | 15 | 15 | 12.2 | 12.2 | 12.2 | 14.5 | 26 | 41 | 27 | 13.6 | 7.9 |
| 14 | 13 | 15 | 15 | 12.2 | 11.1 | 12.2 | 14.5 | 28 | 41 | 25 | 13.4 | 7.9 |
| 15 | 12 | 15 | 15 | 12.2 | 10 | 11.8 | 14.5 | 30 | 39 | 23 | 13.2 | 8.3 |
| 16 | 12 | 15 | 15 | 12.2 | 10 | 11.4 | 14.5 | 28 | 37 | 25 | 13.0 | 8.7 |
| 17 | 12 | 15 | 15 | 12.2 | 10 | 10.4 | 14.8 | 27 | 30 | 27 | 12.9 | 8.7 |
| 18 | 13 | 15 | 14 | 12.2 | 10 | 12.2 | 15.2 | 27 | 29 | 74 | 12.1 | 8.7 |
| 19 | 14 | 15 | 12 | 12.2 | 10 | 12.2 | 15.8 | 27 | 28 | 64 | 11.3 | 8.7 |
| 20 | 15 | 15 | 12 | 12.2 | 10 | 12.2 | 16.4 | 28 | 27 | 53 | 11.6 | 8.5 |
| 21 | 15 | 15 | 12 | 12.2 | 10 | 12.2 | 16.4 | 30 | 26 | 47 | 12.0 | 8.3 |
| 22 | 15 | 15 | 12 | 12.2 | 10 | 12.2 | 16.4 | 31 | 28 | 41 | 12.3 | 8.5 |
| 23 | 15 | 15 | 12 | 12.2 | 10 | 12.2 | 17.1 | 33 | 27 | 35 | 11.8 | 8.7 |
| 24 | 15 | 15 | 12 | 12.2 | 10 | 12.2 | 17.8 | 34 | 26 | 30 | 11.3 | 8.4 |
| 25 | 15 | 15 | 12 | 12.2 | 10 | 12.2 | 20.4 | 30 | 26 | 28 | 11.3 | 8.1 |
| 26 | 15 | 15 | 12 | 12.2 | 10.4 | 12.2 | 23 | 34 | 28 | 28 | 11.3 | 7.9 |
| 27 | 15 | 15 | 12 | 12.2 | 10 | 12.2 | 24 | 37 | 28 | 25 | 11.2 | 8.3 |
| 28 | 15 | 15 | 12 | 12.2 | 10 | 12.2 | 26 | 40 | 28 | 25 | 11.1 | 8.7 |
| 29 | 15 | 15 | 12 | 12.2 | ........ | 12.2 | 23 | 44 | 26 | 24 | 11.0 | 8.3 |
| 30 | 15 | 15 | 12 | 12.2 | ........ | 12.2 | 22 | 46 | 26 | 23 | 10.8 | 7.3 |
| 31 | 15 | ........ | 12 | 12.2 | ........ | 11.9 | ...... | 53 | ........ | 22 | 10.2 | .. |

*Daily discharge, in second-feet, of Oak Creek near Independence, Cal., for 1909–1911*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 7.5 | 8.7 | 7.6 | 8.0 | 15 | 16 | 8.7 | 8.3 | 5.7 | 7.9 | 12 |
| 2 | 7.4 | 8.3 | 8.1 | 7.9 | 9.7 | 17 | 8.3 | 7.9 | 5.5 | 7.5 | 12 |
| 3 | 7.2 | 7.9 | 8.7 | 7.3 | 9.2 | 18 | 7.9 | 8.3 | 6.3 | 7.1 | 8.7 |
| 4 | 7.1 | 8.3 | 8.7 | 6.7 | 8.7 | 19 | 7.9 | 8.7 | 7.1 | 7.5 | 8.3 |
| 5 | 6.9 | 8.7 | 8.7 | 6.7 | 9.2 | 20 | 7.9 | 8.5 | 6.3 | 7.9 | 7.9 |
| 6 | 6.7 | 8.7 | 8.1 | 6.7 | 9.7 | 21 | 7.9 | 8.3 | 5.5 | 8.3 | 7.9 |
| 7 | 7.3 | 8.7 | 7.5 | 6.7 | 9.2 | 22 | 7.9 | 7.5 | 6.2 | 8.3 | 7.9 |
| 8 | 7.9 | 8.7 | 7.9 | 7.3 | 8.7 | 23 | 7.9 | 6.7 | 6.8 | 8.3 | 7.9 |
| 9 | 8.0 | 8.3 | 8.3 | 8.0 | 8.7 | 24 | 8.3 | 7.1 | 7.5 | 7.7 | 7.9 |
| 10 | 8.1 | 7.9 | 8.7 | 8.7 | 8.7 | 25 | 8.7 | 7.5 | 7.6 | 7.1 | 7.9 |
| 11 | 8.3 | 8.3 | 8.3 | 8.3 | 8.7 | 26 | 8.5 | 7.9 | 7.8 | 7.6 | 8.0 |
| 12 | 8.5 | 8.7 | 7.9 | 7.9 | 8.7 | 27 | 8.3 | 8.1 | 7.9 | 8.2 | 8.1 |
| 13 | 8.7 | 8.7 | 7.1 | 7.5 | 8.7 | 28 | 8.1 | 8.3 | 7.3 | 8.7 | 8.0 |
| 14 | 9.2 | 8.7 | 6.3 | 7.1 | 8.5 | 29 | 8.0 | 7.7 | 6.7 | 10 | |
| 15 | 9.7 | 8.7 | 6.0 | 7.5 | 8.3 | 30 | 7.9 | 7.1 | 7.7 | 16 | |
| | | | | | | 31 | 8.3 | | 8.7 | 20 | |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to July 4, 1909, well defined below 90 second-feet; July 7 to 15, 1909, fairly well defined; July 18 to Aug. 1, 1909, indirect method for shifting channels; Aug. 3 to Dec. 31, 1909, fairly well defined; Jan. 1 to Apr. 26, 1910, fairly well defined; Apr. 28, 1910, to Feb. 27, 1911, fairly well defined. Discharge interpolated or estimated for days on which the gage was not read.

*Monthly discharge of Oak Creek near Independence, Cal., for 1906–1911.*

[Drainage area, 26.9 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1906.** | | | | | | | |
| January | | | 6.0 | 0.223 | 0.26 | 369 | |
| February | | | 7.3 | .271 | .28 | 405 | |
| March | | | 7.8 | .290 | .33 | 480 | |
| April | | | 11.9 | .442 | .49 | 708 | |
| May | | | 28.0 | 1.04 | 1.20 | 1,720 | |
| June | | | 69.9 | 2.60 | 2.90 | 4,160 | |
| July | | | 140 | 5.21 | 6.01 | 8,610 | |
| August | | | 73.5 | 2.73 | 3.15 | 4,520 | |
| September | | | 32.2 | 1.20 | 1.34 | 1,920 | |
| The period | | | | | | 22,900 | |
| **1906–7.** | | | | | | | |
| October | 26 | 12 | 20.5 | .762 | .87 | 1,260 | |
| November | 12 | 10 | 11.8 | .439 | .49 | 702 | |
| December | 12 | 10 | 11.3 | .420 | .48 | 695 | |
| January | 11 | 10 | 10.8 | .402 | .46 | 664 | C |
| February | 11 | 10 | 10.4 | .387 | .40 | 578 | C. |
| March | 17 | 10 | 12.2 | .454 | .52 | 750 | C. |
| April | 31 | 11 | 18.8 | .699 | .78 | 1,120 | C. |
| May | 43 | 21 | 26.9 | 1.00 | 1.15 | 1,650 | C. |
| June | 62 | 31 | 42.2 | 1.57 | 1.75 | 2,510 | C. |
| July | 88 | 43 | 57.0 | 2.12 | 2.44 | 3,500 | C. |
| August | 43 | 21 | 32.8 | 1.22 | 1.41 | 2,020 | C. |
| September | 31 | 17 | 20.4 | .758 | .85 | 1,210 | C. |
| The year | 88 | 10 | 22.9 | .853 | 11.60 | 16,700 | |
| **1907–8.** | | | | | | | |
| October | 17 | 13 | 14.5 | .539 | .62 | 892 | C. |
| November | 13 | 13 | 13.0 | .483 | .54 | 774 | C. |
| December | 13 | 13 | 13.0 | .483 | .56 | 799 | C. |
| January | 11 | 8.6 | 10.0 | .372 | .43 | 615 | C. |
| February | 11 | 8.6 | 9.2 | .342 | .37 | 529 | C. |
| March | 11 | 8.6 | 9.3 | .346 | .40 | 572 | C. |
| April | 20 | 8.6 | 12.3 | .457 | .51 | 732 | C. |
| May | 20 | 13 | 15.8 | .587 | .68 | 972 | C. |
| June | 27 | 11 | 21.0 | .781 | .87 | 1,250 | C. |
| July | 31 | 27 | 29.0 | 1.08 | 1.24 | 1,780 | C. |
| August | 28 | 12 | 22.5 | .836 | .96 | 1,380 | C. |
| September | 20 | 12 | 15.5 | .576 | .64 | 922 | C. |
| The year | 31 | 8.6 | 15.4 | .573 | 7.82 | 11,200 | |

*Monthly discharge of Oak Creek near Independence, Cal., for 1908–1911*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1908–9.** | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | C. |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | C. |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | C. |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | A. |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| September | [illegible] | [illegible] | [illegible] | [illegible] | .78 | [illegible] | B. |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | 17.38 | [illegible] | |
| **1909–10.** | | | | | | | |
| October | [illegible] | [illegible] | 14.6 | [illegible] | [illegible] | [illegible] | B. |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| May | [illegible] | [illegible] | [illegible] | 1.07 | [illegible] | [illegible] | B. |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | B. |
| September | [illegible] | [illegible] | [illegible] | [illegible] | .25 | [illegible] | B. |
| The year | [illegible] | [illegible] | 17.7 | [illegible] | [illegible] | [illegible] | |
| **1910–11.** | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | .299 | .34 | 494 | B. |
| November | [illegible] | [illegible] | [illegible] | .304 | .34 | [illegible] | B. |
| December | [illegible] | [illegible] | [illegible] | .273 | .31 | [illegible] | B. |
| January | 20 | [illegible] | [illegible] | .312 | .36 | 516 | B. |
| February | 15 | 7.9 | [illegible] | .326 | .34 | [illegible] | B. |

NOTE.—Discharge determined as follows: January, 1909, estimated; February to September, 1909, interpolated between discharge measurements. The remainder of the record from rating curves covering short periods of time and by the indirect method for shifting channels.

## LITTLE PINE CREEK NEAR INDEPENDENCE, CAL.[1]

This station, which was located about 300 feet above the city waterworks and 1 mile west of Independence, in sec. 18, T. 13 S., R. 35 E., was established August 20, 1906, and was discontinued February 28, 1911. It replaced the station at the city waterworks which was established June 15, 1905, and destroyed in June, 1906.

No water is diverted above the gage. The town of Independence diverts about 0.5 second-foot of water 100 feet below the station. The drainage area above the mouth of the canyon is approximately 8.4 square miles.

The gage is a vertical staff on the left bank at the footbridge from which discharge measurements were made.

Both banks are high and rocky and not likely to overflow. The bed of the stream is rough and the current is swift. The channel, which is composed of bowlders and gravel, shifts somewhat.

[1] This creek is commonly known as Independence Creek.

*Discharge measurements of Little Pine Creek near Independence, Cal., for 1905–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* |
| **1905.** | | | |
| June 15 | J. S. Evans | 1.10 | 4[illegible] |
| July 21 | do | .72 | 19.4 |
| Aug. 23 | do | .47 | 7.[illegible] |
| Nov. 11 | F. R. S. Buttemer | .35 | 3.[illegible] |
| Dec. 3 | do | .37 | 3.7 |
| **1906.** | | | |
| Jan. 23 | G. R. Shuey | .42 | 4.[illegible] |
| 30 | do | | 2.[illegible] |
| Feb. 13 | do | .36 | 2.4 |
| Mar. 2 | do | | 4.[illegible] |
| 25 | do | | 4.9 |
| Apr. 5 | do | | 5.0 |
| 14 | do | .50 | 6.6 |
| 22 | do | .60 | 11 |
| 30 | do | .61 | 11 |
| May 10 | do | .80 | 25 |
| 22 | do | .9[illegible] | 43 |
| 29 | do | .87 | 32 |
| June 4 | do | .65 | 31 |
| 12 | do | 1.55 | 86 |
| 23 | do | | 130 |
| July 1 | do | | 116 |
| 9 | do | | 144 |
| 19 | do | | 137 |
| Aug. 9 | do | | 60 |
| Sept. 11 | do | .90 | 26 |
| 23 | do | .67 | 16 |
| Oct. 20 | do | .50 | 7.5 |
| Nov. 13 | do | .45 | 5.0 |
| **1907.** | | | |
| Feb. 24 | G. R. Shuey | .30 | [illegible] |
| Mar. 19 | do | .60 | 10.0 |
| Apr. 16 | do | .80 | 19 |
| May 23 | do | 1.30 | 33 |
| June 3 | do | 1.30 | 69 |
| 28 | do | 1.40 | 66 |
| July 10 | do | 1.45 | 64 |
| Aug. 14 | R. B. Post | 1.00 | 25 |
| 30 | do | .85 | 14 |
| Sept. 26 | do | .60 | 5.3 |
| Oct. 19 | do | .66 | 6.8 |
| 31 | do | .77 | 8.4 |
| Nov. 11 | do | .68 | 5.6 |
| 30 | do | .64 | 4.7 |
| **1908.** | | | |
| Feb. 6 | R. B. Post | .52 | 2.6 |
| 27 | do | .54 | 2.6 |
| Mar. 14 | do | .56 | 2.8 |
| 24 | do | .63 | 5.4 |
| Apr. 10 | do | .60 | 4.7 |
| 23 | do | .82 | 11 |
| May 1 | do | 1.00 | 18 |
| 9 | do | .96 | 16 |
| **1908.** | | | |
| June [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] |
| 2[illegible] | do | [illegible] | [illegible] |
| July [illegible] | do | [illegible] | [illegible] |
| 1[illegible] | do | [illegible] | [illegible] |
| 2[illegible] | W. A. [illegible] | [illegible] | [illegible] |
| 2[illegible] | do | [illegible] | [illegible] |
| Aug. [illegible] | do | [illegible] | [illegible] |
| 2[illegible] | do | .7[illegible] | 1[illegible] |
| Sept. [illegible] | do | .7[illegible] | 1[illegible] |
| 2[illegible] | do | .6[illegible] | [illegible] |
| Oct. [illegible] | do | .6[illegible] | [illegible].4 |
| 14 | do | .6[illegible] | [illegible] |
| 2[illegible] | A. [illegible] Barrows | .6[illegible] | [illegible].2 |
| Nov. [illegible] | do | .6[illegible] | [illegible] |
| 1[illegible] | do | .6[illegible] | 5.[illegible] |
| **1909.** | | | |
| Jan. 1[illegible] | E. E. Hames | .6[illegible] | 6.5 |
| Feb. [illegible] | do | .5[illegible] | 5.0 |
| 20 | do | .6[illegible] | 6.0 |
| Mar. 9 | do | .6[illegible] | 5.6 |
| 3[illegible] | do | .6[illegible] | [illegible].2 |
| Apr. 2[illegible] | do | [illegible] | 1[illegible].9 |
| May 1[illegible] | do | 1.0[illegible] | 3[illegible] |
| 22 | do | 1.07 | 3[illegible] |
| June [illegible] | do | 1.5[illegible] | [illegible].0 |
| 2[illegible] | do | 1.[illegible] | 11[illegible] |
| July [illegible] | do | 1.3[illegible] | 8[illegible].9 |
| 14 | do | 1.3[illegible] | 9[illegible].0 |
| Aug. 4 | do | .7[illegible] | 3[illegible].6 |
| 2[illegible] | do | .5[illegible] | 25.3 |
| Sept. 1[illegible] | do | .4[illegible] | 1[illegible].5 |
| 30 | do | .3[illegible] | 10.5 |
| Oct. 2[illegible] | do | .3[illegible] | 7.6 |
| Nov. 1[illegible] | do | .3[illegible] | 7.6 |
| **1910.** | | | |
| Feb. 2[illegible] | B. E. Hames | .1[illegible] | 4.6 |
| Mar. 1[illegible] | do | .25 | 6.2 |
| Apr. [illegible] | do | .27 | 6.7 |
| 2[illegible] | do | .53 | 22 |
| May 2[illegible] | do | .6[illegible] | 32 |
| June 2[illegible] | C. H. Lee | .6[illegible] | 32 |
| July 14 | do | .65 | 25 |
| 1[illegible] | do | 1.10 | 71 |
| Aug. 8 | do | .51 | 15 |
| Sept. 7 | F. G. Wood | .33 | 6.6 |
| 2[illegible] | G. T. Peekema | .28 | 4.9 |
| Oct. 19 | do | .29 | 5.8 |
| Nov. 12 | do | .26 | 4.9 |
| Dec. 8 | do | .25 | 4.0 |
| **1911.** | | | |
| Jan. 20 | G. T. Peekema | .26 | 4.4 |
| Feb. 17 | C. H. Lee | .31 | 6.5 |

NOTE.—Beginning Sept. 11, 1906, gage heights refer to gage at new station.

*Daily gage height, in feet, of Little Pine Creek near Independence, Cal., for 1905–1911.*

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1905.** | | | | | **1905.** | | | | |
| 1 | | 0.9 | 0.65 | 0.45 | 16 | | 0.8 | 0.55 | 0.35 |
| 2 | | .9 | .65 | .45 | 17 | | .75 | .55 | .4 |
| 3 | | .85 | .65 | .45 | 18 | | .75 | .55 | .4 |
| 4 | | .85 | .6 | .45 | 19 | | .75 | .55 | .4 |
| 5 | | .85 | .6 | .45 | 20 | | .75 | .55 | .35 |
| 6 | | .85 | .6 | .45 | 21 | 1.1 | .7 | .55 | .35 |
| 7 | | .9 | .55 | .45 | 22 | 1.05 | .7 | .55 | .35 |
| 8 | | .85 | .55 | .45 | 23 | 1.05 | .7 | .55 | .4 |
| 9 | | .85 | .55 | .45 | 24 | 1.1 | .7 | .55 | .4 |
| 10 | | .85 | .55 | .35 | 25 | .95 | .7 | .55 | .35 |
| 11 | | .9 | .55 | .35 | 26 | .95 | .7 | .55 | .35 |
| 12 | | .9 | .55 | .35 | 27 | .95 | .7 | .5 | .35 |
| 13 | | .9 | .55 | .4 | 28 | .95 | .7 | .5 | .35 |
| 14 | | .85 | .55 | .4 | 29 | .9 | .7 | .5 | .35 |
| 15 | 1.1 | .8 | .55 | .35 | 30 | .9 | .7 | .5 | .35 |
| | | | | | 31 | | .65 | .45 | |

NOTE.—Gage heights interpolated June 16–20.

*Daily gage height, in feet, of Little Pine Creek near Independence, Cal., for 1905–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Sept. | Day. | Oct. | Nov. | Dec. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1905-6. | | | | | 1905-6. | | | | |
| 1 | 0.35 | | | | 16 | 0.4 | | 0.4 | |
| 2 | .35 | | | | 17 | .35 | | .4 | 0.8 |
| 3 | .35 | | 0.4 | 0.9 | 18 | .35 | | .35 | |
| 4 | .35 | | .4 | | 19 | .35 | | .4 | .8 |
| 5 | .35 | | .4 | .9 | 20 | .35 | | .4 | |
| 6 | .35 | | .4 | | 21 | .4 | | .3 | .7 |
| 7 | .35 | | .4 | .9 | 22 | .35 | | .3 | |
| 8 | .35 | | .35 | | 23 | .35 | | .35 | .65 |
| 9 | .35 | | .4 | | 24 | .35 | | .35 | |
| 10 | .35 | | .4 | | 25 | .35 | | .3 | .7 |
| 11 | .35 | 0.35 | .4 | .9 | 26 | .35 | | .3 | |
| 12 | .35 | .35 | .3 | | 27 | .35 | | .3 | .6 |
| 13 | .35 | | .35 | .8 | 28 | .35 | | .35 | |
| 14 | .35 | | .35 | | 29 | | | .35 | .7 |
| 15 | .4 | | .4 | .8 | 30 | | | .35 | |
| | | | | | 31 | | | .35 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 1 | 0.6 | | | 0.4 | 0.4 | 0.3 | 0.4 | | | 1.5 | | 0.9 |
| 2 | | 0.5 | 0.5 | | | | | 0.9 | | | | |
| 3 | .6 | | | .5 | .4 | .3 | .5 | | 1.1 | 1.5 | | 1.0 |
| 4 | | .5 | .5 | | | | | .8 | | | 1.2 | |
| 5 | .6 | | | .4 | .3 | .35 | .5 | .8 | 1.3 | 1.7 | | 1.0 |
| 6 | | .4 | .4 | | | | | | | | 1.3 | |
| 7 | | | | | .4 | .3 | .4 | .8 | 1.3 | 1.6 | | .9 |
| 8 | | .5 | .4 | | | | | | | | 1.1 | |
| 9 | | | | | .3 | .3 | .5 | .9 | 1.2 | 1.5 | | 1.0 |
| 10 | | .5 | .4 | | | | | | 1.3 | | 1.1 | |
| 11 | .7 | | | | .3 | .35 | .7 | .95 | | | | |
| 12 | | .4 | .4 | | | | | .9 | 1.1 | | 1.0 | |
| 13 | .6 | .45 | | .5 | .3 | .3 | .6 | | | 1.4 | | 1.0 |
| 14 | | .5 | .4 | | | | | .8 | 1.0 | | 1.0 | |
| 15 | .6 | | | .4 | .3 | .4 | .7 | | | 1.3 | | .9 |
| 16 | | .4 | .5 | | | | | 1.0 | 1.2 | | | |
| 17 | | | | | .3 | | .8 | 1.1 | | 1.3 | | 1.0 |
| 18 | .6 | .4 | .4 | .4 | | | | | | | 1.1 | |
| 19 | | | | | .3 | | .8 | .9 | | | | .9 |
| 20 | .5 | .5 | .4 | .4 | | .6 | | | | | 1.1 | |
| 21 | .7 | | | | .3 | | .9 | .8 | | | | .8 |
| 22 | .6 | .5 | .5 | .4 | | .4 | | | | | 1.0 | |
| 23 | | | | | .35 | | .9 | .9 | | | | .7 |
| 24 | | .4 | .4 | .5 | | .5 | | | | | 1.1 | |
| 25 | | | | | .4 | | .8 | .9 | | 1.4 | | |
| 26 | | .5 | .4 | .5 | | .5 | | | | | 1.0 | |
| 27 | | | | | .3 | | .9 | | | 1.3 | | |
| 28 | | .4 | .5 | .4 | | .4 | | | | | 1.2 | |
| 29 | | | | | | | .8 | | 1.4 | 1.2 | 1.3 | |
| 30 | | | .4 | .4 | | .4 | | | | | | |
| 31 | | | .4 | .5 | | | | | | | 1.2 | |
| 1907-8. | | | | | | | | | | | | |
| 1 | .6 | | | | .6 | | .6 | | .9 | | 1.1 | |
| 2 | | .7 | .7 | .6 | | .5 | | 1.0 | | 1.2 | | .7 |
| 3 | .6 | | | | .6 | | .6 | | 1.0 | | 1.1 | |
| 4 | | .7 | .7 | .6 | | .5 | | 1.0 | | 1.2 | | .65 |
| 5 | .6 | | | | .6 | | .6 | | 1.0 | | 1.1 | |
| 6 | | .7 | .7 | .6 | | .5 | | 1.0 | | 1.2 | | .6 |
| 7 | .6 | | | | .5 | | .6 | | 1.0 | | 1.1 | |
| 8 | | .7 | .7 | .6 | | .55 | | .95 | | 1.1 | | .6 |
| 9 | .6 | | | | .5 | | .6 | | 1.0 | | 1.1 | |
| 10 | | .7 | .7 | .6 | | .55 | | .9 | | 1.1 | | .7 |
| 11 | .6 | | | | .5 | | .6 | | 1.05 | | 1.05 | |
| 12 | | .7 | .7 | .6 | | .5 | | .9 | | 1.1 | | .6 |
| 13 | .6 | .7 | | | .5 | | .65 | | 1.1 | | 1.0 | |
| 14 | | .7 | .7 | .6 | | .55 | | .9 | | 1.1 | | .6 |
| 15 | .6 | | | | .5 | | .7 | | 1.1 | | .95 | |

*Daily gage height, in feet, of Little Pine Creek near Independence, Cal., for 1905–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 16 | | 0.9 | 0.7 | 0.6 | | 0.6 | | 0.85 | | 1.1 | | 0.6 |
| 17 | 0.6 | | | | 0.5 | | 0.7 | | 1.1 | | 0.9 | |
| 18 | | .7 | .7 | .6 | | .6 | | .85 | | 1.1 | | .6 |
| 19 | .7 | | | | .5 | | .75 | | 1.15 | | .9 | |
| 20 | | .7 | .7 | .6 | | .6 | | .9 | | 1.05 | | .6 |
| 21 | .7 | | | | .5 | | | | 1.1 | | .85 | |
| 22 | | .7 | .7 | .6 | | .6 | .8 | .9 | | 1.0 | | .65 |
| 23 | .7 | | | | .5 | | | | 1.1 | | .8 | |
| 24 | | .7 | .7 | .6 | | .6 | .8 | .95 | | 1.05 | | .7 |
| 25 | .8 | | | | .5 | | | | 1.0 | | .8 | |
| 26 | | .7 | .7 | .6 | | .6 | .8 | .9 | | 1.1 | | .7 |
| 27 | .8 | | | | .5 | | | | 1.0 | | .75 | |
| 28 | | .7 | | .6 | | .6 | .85 | 1.0 | | 1.1 | | .7 |
| 29 | .8 | | .7 | | .5 | | | | 1.1 | | .7 | |
| 30 | | .7 | | .6 | | .6 | .9 | 1.0 | | 1.1 | | .7 |
| 31 | .8 | | .7 | | | | | | | | .7 | |
| 1908–9. | | | | | | | | | | | | |
| 1 | .7 | | | .6 | | .6 | .6 | | 1.4 | 1.55 | | .6 |
| 2 | | .65 | .65 | | .6 | | | | | | .75 | |
| 3 | .7 | | | .6 | .6 | .65 | | | 1.65 | 1.65 | | .6 |
| 4 | | .65 | .6 | | .6 | | .6 | 1.0 | | | .75 | |
| 5 | .7 | | | .5 | | .6 | | 1.0 | 1.65 | 1.45 | | .55 |
| 6 | | .65 | .6 | | .55 | | .6 | 1.0 | | 1.3 | .75 | |
| 7 | .7 | | | .6 | | .6 | | | 1.65 | 1.25 | | .5 |
| 8 | | .6 | .6 | | .7 | | .6 | 1.0 | | | .75 | |
| 9 | .7 | | | .6 | | .65 | | | 1.6 | 1.25 | | .45 |
| 10 | | .6 | .6 | | .6 | | .65 | 1.25 | | | .65 | |
| 11 | .7 | | | .8 | | .6 | | | 1.55 | 1.3 | | .45 |
| 12 | | .6 | .6 | | .6 | | .7 | 1.25 | | | .65 | |
| 13 | .7 | | | .8 | | .6 | | | 1.55 | 1.45 | | .45 |
| 14 | | .6 | .6 | | .55 | | .75 | 1.0 | | | .65 | |
| 15 | .7 | | | .65 | | .6 | | | 1.55 | 1.45 | | .45 |
| 16 | | .6 | .6 | .65 | .6 | | .75 | 1.0 | | | .65 | |
| 17 | .7 | | | .6 | | .6 | | | 1.55 | 1.35 | | .45 |
| 18 | | .6 | .6 | | .65 | | .8 | 1.0 | | | .75 | |
| 19 | .6 | | | .6 | | .6 | | | 1.5 | 1.25 | | .45 |
| 20 | | .6 | .6 | | .6 | .6 | .85 | 1.0 | | | .80 | |
| 21 | .6 | | | .7 | | .6 | .85 | | 1.45 | .95 | | .4 |
| 22 | | .6 | .6 | | .6 | | | 1.2 | | | .65 | |
| 23 | .6 | | | .65 | | .6 | | | 1.45 | 1.0 | | .35 |
| 24 | | .6 | .6 | | .65 | | .75 | 1.25 | | | .65 | |
| 25 | .65 | | | .6 | | .6 | | | 1.85 | | | .3 |
| 26 | | .6 | .6 | | .6 | | | 1.3 | | | .6 | |
| 27 | .65 | | | .6 | | .6 | | | 1.85 | .95 | | .35 |
| 28 | | .6 | .6 | | .6 | | | 1.3 | | | .65 | |
| 29 | .65 | | | .6 | | .6 | | | 1.65 | .85 | | .35 |
| 30 | | .6 | .6 | | | | | 1.35 | | | .65 | .35 |
| 31 | .65 | | | .6 | | .6 | | | | .85 | | |
| 1909–10. | | | | | | | | | | | | |
| 1 | .35 | | | .4 | | .25 | | .55 | | .75 | | .38 |
| 2 | | .35 | .35 | | | | .25 | | .95 | | .6 | |
| 3 | .35 | | | .4 | .25 | .25 | | .55 | | .75 | | .44 |
| 4 | | .35 | .4 | | | | .25 | | .95 | | .6 | |
| 5 | .3 | | | .35 | .3 | .25 | | .55 | | .7 | | .36 |
| 6 | | .35 | .4 | | | | .35 | | .95 | | .6 | |
| 7 | .3 | | | .35 | .3 | .25 | | .55 | | .55 | | .40 |
| 8 | | .35 | .35 | | | | .35 | | .95 | | .51 | |
| 9 | .3 | | | .35 | .25 | .25 | | .6 | | .65 | | .32 |
| 10 | | .35 | .45 | | | | .35 | | .95 | | .50 | |
| 11 | .35 | | | .35 | .25 | .25 | | .65 | | .65 | .50 | .32 |
| 12 | | .35 | | | | | .35 | | .95 | | .48 | |
| 13 | .3 | | | .35 | .25 | .25 | | .65 | | .65 | .48 | .30 |
| 14 | | .35 | .35 | | | | .35 | | .95 | .65 | | |
| 15 | .3 | | | .35 | .25 | .25 | | .65 | | .65 | .46 | .40 |
| 16 | | .35 | .25 | | | | .35 | | .85 | | | |
| 17 | .35 | | | .25 | .3 | .3 | | .65 | | .65 | | .32 |
| 18 | | .35 | .35 | | | .25 | .35 | | .8 | 1.10 | .44 | |
| 19 | .35 | | | .25 | .25 | .25 | | .65 | | 1.00 | .43 | .33 |
| 20 | | .3 | .35 | | | | .45 | .68 | .75 | | | |

*Daily gage height, in feet, of Little Pine Creek near Independence, Cal., for 1906–1911—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 21 | 0.35 | | | 0.25 | 0.3 | 0.25 | | 0.7 | 0.68 | 0.85 | | 1.3 |
| 22 | | 0.35 | 0.35 | | | | 0.55 | | .7 | | 0.48 | |
| 23 | .25 | | | .25 | .3 | .25 | | .75 | | .85 | .4 | .1 |
| 24 | | .3 | .3 | | | | .5 | | .5 | | | |
| 25 | .25 | | | .25 | .3 | .25 | | .8 | | .75 | | .2 |
| 26 | | .35 | .35 | | .3 | | .55 | | .5 | | | |
| 27 | .25 | | | .25 | .35 | .25 | | .85 | | .75 | .42 | .0 |
| 28 | | .3 | .3 | | | | .5 | | .75 | | .41 | .2 |
| 29 | .25 | | | .25 | | .25 | .3 | .85 | | .7 | | .3 |
| 30 | | .3 | .3 | | | | .35 | | .8 | | .4 | |
| 31 | .35 | | | .25 | | .25 | | .9 | | .55 | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 0.3 | | | 0.17 | | 16 | | 0.25 | 0.25 | | 0.24 |
| 2 | | 0.25 | 0.25 | | 0.36 | 17 | 0.3 | | | 0.20 | |
| 3 | .25 | | | .22 | | 18 | | .3 | .25 | | .20 |
| 4 | | .3 | .25 | | .30 | 19 | .3 | | | .24 | |
| 5 | .25 | | | .20 | | 20 | | .25 | .25 | | .24 |
| 6 | | .3 | .25 | | .26 | 21 | .3 | | | .30 | |
| 7 | .25 | | | .20 | | 22 | | .3 | .2 | | .22 |
| 8 | | .3 | .25 | | .25 | 23 | | | | .24 | |
| 9 | .3 | | | .20 | | 24 | .3 | .3 | .25 | | .22 |
| 10 | | .25 | .25 | | .20 | 25 | .3 | | | .25 | |
| 11 | .3 | | | .20 | | 26 | | .25 | .3 | | .22 |
| 12 | | .25 | .25 | | .28 | 27 | .3 | | | .23 | |
| 13 | .3 | | | .24 | | 28 | | .25 | .2 | | .20 |
| 14 | | .3 | .2 | | .24 | 29 | .25 | | | .24 | |
| 15 | .35 | | | .24 | | 30 | | .25 | .25 | | |
| | | | | | | 31 | .3 | | | .19 | |

*Rating table for Little Pine Creek near Independence, Cal., from June 15 to December 31, 1905.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 0.30 | [illegible] | 0.60 | [illegible] | 0.80 | 24 | 1.00 | 39 |
| .40 | 1.5 | .70 | 18 | .90 | 31 | 1.10 | 47 |
| .50 | [illegible] | | | | | | |

NOTE.—Table is based on five discharge measurements made during 1905. It is well defined between gage heights 0.4 foot and 1.1 feet.

*Daily discharge, in second-feet, of Little Pine Creek near Independence, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 5.3 | 5.3 | 5.3 | 5.3 | 22 | 69 | 112 | 44 | [illegible] |
| 2 | 5.3 | 5.3 | 5.8 | 5.3 | 24 | 82 | 117 | 40 | [illegible] |
| 3 | 5.3 | 5.5 | 6.4 | 5.3 | 26 | 96 | 122 | 40 | [illegible] |
| 4 | 4.6 | 5.3 | 5.8 | 5.3 | 28 | 96 | 112 | 40 | [illegible] |
| 5 | 4.0 | 5.0 | 5.3 | 5.3 | 28 | 96 | 103 | 40 | [illegible] |
| 6 | 4.6 | 4.6 | 5.3 | 5.3 | 28 | 96 | 89 | 40 | [illegible] |
| 7 | 5.3 | 6.2 | 5.3 | 5.3 | 28 | 96 | 84 | 40 | [illegible] |
| 8 | 5.3 | 7.4 | 5.8 | 5.3 | 28 | 94 | 84 | 40 | [illegible] |
| 9 | 5.3 | 6.6 | 6.4 | 5.8 | 40 | 91 | 84 | 36 | [illegible] |
| 10 | 5.8 | 5.3 | 5.8 | 6.4 | 53 | 88 | 80 | 31 | [illegible] |
| 11 | 12 | 5.3 | 5.3 | 7.1 | 53 | 85 | 89 | 31 | [illegible] |
| 12 | 12 | 5.3 | 5.3 | 7.8 | 53 | 85 | 96 | 31 | [illegible] |
| 13 | 12 | 5.0 | 5.3 | 7.7 | 40 | 85 | 103 | 31 | [illegible] |
| 14 | 9.2 | 4.6 | 5.3 | 6.6 | 28 | 85 | 103 | 31 | [illegible] |
| 15 | 6.4 | 5.0 | 5.3 | 6.6 | 28 | 85 | 103 | 31 | [illegible] |

*Daily discharge, in second-feet, of Little Pine Creek near Independence, Cal., for 1909–1911*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 16 | 6.4 | 5.3 | 5.3 | 9.6 | 28 | 85 | 98 | 31 | 16 |
| 17 | 5.3 | 5.8 | 5.3 | 11 | 28 | 85 | 94 | 35 | 16 |
| 18 | 5.3 | 6.4 | 5.3 | 12 | 28 | 82 | 89 | 40 | 16 |
| 19 | 5.3 | 5.8 | 5.3 | 14 | 28 | 80 | 84 | 42 | 16 |
| 20 | 6.6 | 5.3 | 5.3 | 15 | 28 | 77 | 70 | 44 | 16 |
| 21 | 7.8 | 5.3 | 5.3 | 15 | 38 | 74 | 57 | 38 | 13 |
| 22 | 7.1 | 5.3 | 5.3 | 13 | 48 | 74 | 59 | 31 | 13 |
| 23 | 6.4 | 5.8 | 5.3 | 11 | 50 | 74 | 61 | 31 | 10 |
| 24 | 5.8 | 6.4 | 5.3 | 9.6 | 53 | 107 | 60 | 31 | 8.6 |
| 25 | 5.3 | 5.8 | 5.3 | 10 | 56 | 140 | 59 | 29 | 7.3 |
| 26 | 5.3 | 5.3 | 5.3 | 12 | 58 | 140 | 58 | 27 | 8.6 |
| 27 | 5.3 | 5.3 | 5.3 | 14 | 58 | 140 | 57 | 29 | 10 |
| 28 | 5.3 | 5.3 | 5.3 | 16 | 58 | 131 | 52 | 31 | 10 |
| 29 | 5.3 | ....... | 5.3 | 18 | 61 | 122 | 48 | 31 | 10 |
| 30 | 5.3 | ....... | 5.3 | 20 | 64 | 117 | 48 | 31 | 10 |
| 31 | 5.3 | ....... | 5.3 | ....... | 66 | ....... | 48 | 29 | ....... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 10 | 10 | 10 | 13 | 6.5 | 6.5 | 6.5 | 22 | 54 | 38 | 23 | 8.7 |
| 2 | 10 | 10 | 10 | 13 | 6.5 | 6.5 | 6.5 | 22 | 56 | 38 | 21 | 10.1 |
| 3 | 10 | 10 | 12 | 13 | 6.5 | 6.5 | 6.5 | 22 | 56 | 38 | 21 | 11.5 |
| 4 | 8.6 | 10 | 13 | 12 | 7.2 | 6.5 | 6.5 | 22 | 56 | 36 | 21 | 9.7 |
| 5 | 7.3 | 10 | 13 | 10 | 8.0 | 6.5 | 8.0 | 22 | 56 | 34 | 21 | 7.9 |
| 6 | 7.3 | 10 | 13 | 10 | 8.0 | 6.5 | 10 | 22 | 56 | 28 | 21 | 8.7 |
| 7 | 7.3 | 10 | 12 | 10 | 8.0 | 6.5 | 10 | 22 | 56 | 22 | 18 | 9.5 |
| 8 | 7.3 | 10 | 10 | 10 | 7.2 | 6.5 | 10 | 24 | 56 | 26 | 15 | 7.9 |
| 9 | 7.3 | 10 | 13 | 10 | 6.5 | 6.5 | 10 | 26 | 56 | 30 | 15 | 6.3 |
| 10 | 8.6 | 10 | 16 | 10 | 6.5 | 6.5 | 10 | 28 | 56 | 30 | 14.5 | 6.3 |
| 11 | 10.0 | 10 | 15 | 10 | 6.5 | 6.5 | 10 | 30 | 56 | 30 | 14.5 | 6.3 |
| 12 | 8.6 | 10 | 14 | 10 | 6.5 | 6.5 | 10 | 30 | 56 | 30 | 13.5 | 5.9 |
| 13 | 7.3 | 10 | 12 | 10 | 6.5 | 6.5 | 10 | 30 | 56 | 30 | 13.5 | 5.5 |
| 14 | 7.3 | 10 | 10 | 10 | 6.5 | 6.5 | 10 | 30 | 56 | 30 | 13.0 | 7.5 |
| 15 | 7.3 | 10 | 7.6 | 10 | 6.5 | 6.5 | 10 | 30 | 52 | 30 | 12.5 | 9.5 |
| 16 | 8.6 | 10 | 5.2 | 8 | 7.2 | 7.2 | 10 | 30 | 48 | 30 | 12.2 | 7.9 |
| 17 | 10 | 10 | 7.6 | 6.5 | 8.0 | 8.0 | 10 | 30 | 45 | 30 | 11.8 | 6.3 |
| 18 | 10 | 10 | 10 | 6.5 | 7.2 | 6.5 | 10 | 30 | 43 | 71 | 11.5 | 6.5 |
| 19 | 10 | 8.6 | 10 | 6.5 | 6.5 | 6.5 | 13 | 30 | 41 | 59 | 11.0 | 6.7 |
| 20 | 10 | 7.3 | 10 | 6.5 | 7.2 | 6.5 | 16 | 32 | 38 | 52 | 11.8 | 6.0 |
| 21 | 10 | 8.6 | 10 | 6.5 | 8.0 | 6.5 | 19 | 34 | 32 | 44 | 12.7 | 5.2 |
| 22 | 7.6 | 10 | 10 | 6.5 | 8.0 | 6.5 | 22 | 36 | 34 | 44 | 13.5 | 5.6 |
| 23 | 5.2 | 10 | 10 | 6.5 | 8.0 | 6.5 | 22 | 38 | 32 | 44 | 11.5 | 5.9 |
| 24 | 5.2 | 10 | 10 | 6.5 | 8.0 | 6.5 | 22 | 41 | 30 | 39 | 11.2 | 5.4 |
| 25 | 5.2 | 10 | 10 | 6.5 | 8.0 | 6.5 | 22 | 43 | 30 | 34 | 11.0 | 4.9 |
| 26 | 5.2 | 10 | 10 | 6.5 | 4.6 | 6.5 | 22 | 45 | 30 | 34 | 10.8 | 5.2 |
| 27 | 5.2 | 10 | 10 | 6.5 | 10.0 | 6.5 | 22 | 48 | 34 | 34 | 10.5 | 5.5 |
| 28 | 5.2 | 10 | 10 | 6.5 | 8.0 | 6.5 | 22 | 48 | 38 | 32 | 10.0 | 4.9 |
| 29 | 5.2 | 10 | 10 | 6.5 | ....... | 6.5 | 21 | 48 | 40 | 30 | 10.2 | 4.3 |
| 30 | 7.6 | 10 | 10 | 6.5 | ....... | 6.5 | 22 | 50 | 43 | 28 | 10.5 | 4.9 |
| 31 | 10 | ....... | 10 | 6.5 | ....... | 6.5 | ....... | 52 | ....... | 26 | 9.5 | ....... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 5.5 | 4.8 | 4.0 | 2.4 | 10.0 | 16 | 6.5 | 4.0 | 4.0 | 3.1 | 7.1 |
| 2 | 4.8 | 4.0 | 4.0 | 2.8 | 7.9 | 17 | • 5.5 | 4.8 | 4.0 | 2.5 | 6.3 |
| 3 | 4.0 | 4.8 | 4.0 | 3.1 | 6.2 | 18 | 5.5 | 5.5 | 4.0 | 3.1 | 5.5 |
| 4 | 4.0 | 5.5 | 4.0 | 2.8 | 5.5 | 19 | 5.5 | 4.8 | 4.0 | 3.7 | 4.6 |
| 5 | 4.0 | 5.5 | 4.0 | 2.5 | 4.9 | 20 | 5.5 | 4.0 | 4.0 | 4.6 | 3.7 |
| 6 | 4.0 | 5.5 | 4.0 | 2.5 | 4.3 | 21 | 5.5 | 4.8 | 3.2 | 5.5 | 3.4 |
| 7 | 4.0 | 5.5 | 4.0 | 2.5 | 4.2 | 22 | 5.5 | 5.5 | 2.5 | 4.6 | 3.1 |
| 8 | 4.8 | 5.5 | 4.0 | 2.5 | 4.0 | 23 | 5.5 | 5.5 | 3.2 | 3.7 | 3.1 |
| 9 | 5.5 | 4.8 | 4.0 | 2.5 | 3.2 | 24 | 5.5 | 5.5 | 4.0 | 3.8 | 3.1 |
| 10 | 5.5 | 4.0 | 4.0 | 2.5 | 2.5 | 25 | 5.5 | 4.8 | 4.8 | 4.0 | 2.6 |
| 11 | 5.5 | 4.0 | 4.0 | 2.5 | 3.7 | 26 | 5.5 | 4.0 | 5.5 | 3.7 | 2.1 |
| 12 | 5.5 | 4.0 | 4.0 | 3.1 | 4.9 | 27 | 5.5 | 4.0 | 4.0 | 3.4 | 3.8 |
| 13 | 5.5 | 4.8 | 3.2 | 3.7 | 4.3 | 28 | 4.8 | 4.0 | 2.5 | 6.0 | 5.5 |
| 14 | 6.5 | 5.5 | 2.5 | 3.7 | 3.7 | 29 | 4.0 | 4.0 | 3.2 | 11.5 | ....... |
| 15 | 7.5 | 4.8 | 3.2 | 3.7 | 5.4 | 30 | 4.8 | 4.0 | 4.0 | 12.0 | ....... |
| | | | | | | 31 | 5.5 | ....... | 4.0 | 13.5 | ....... |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to June 25, 1909. well defined below 115 second-feet; June 26, 1909, to July 18, 1910, well defined below 90 second-feet: 19, 1910, to Feb. 28, 1911, fairly well defined. Discharge interpolated for days on which gage was not

[illegible] -1911.

[illegible]

*Monthly discharge of Little Pine Creek near Independence, Cal., for 1905–1911*—Contd.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1909–10.** | | | | | | | |
| April | 22 | 6.5 | 13.6 | 0.635 | 0.71 | 809 | A. |
| May | 52 | 22 | 32.8 | 1.53 | 1.76 | 2,020 | B. |
| June | 56 | 30 | 46.4 | 2.17 | 2.42 | 2,760 | B. |
| July | 71 | 22 | 35.5 | 1.66 | 1.91 | 2,180 | B. |
| August | 23 | 9.5 | 14.1 | .659 | .76 | 867 | A. |
| September | 11.5 | 4.3 | 6.88 | .321 | .36 | 409 | A. |
| The year | 71 | 4.3 | 16.7 | .780 | 10.60 | 12.100 | |
| **1910–11.** | | | | | | | |
| October | 7.5 | 4.0 | 5.25 | .245 | .28 | 323 | A. |
| November | 5.5 | 4.0 | 4.74 | .221 | .25 | 282 | A. |
| December | 5.5 | 2.5 | 3.80 | .178 | .21 | 234 | A. |
| January | 13.5 | 2.4 | 4.24 | .198 | .23 | 261 | A. |
| February | 10.0 | 2.1 | 4.62 | .216 | .22 | 257 | A. |

NOTE.—Discharge determined from rating curves covering short periods of time and by interpolation when there is no gage record.

## SHEPARD CREEK NEAR THEBE, CAL.[1]

No regular gaging station has been maintained on Shepard Creek. All measurements were made at a point about 3 miles east of the mouth of the canyon, in sec. 9, T. 14 S., R. 35 E., above all diversions.

*Discharge measurements of Shepard Creek near Thebe, Cal., in 1906–1909.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| **1906.** | | *Sec.-ft.* | **1908.** | | *Sec.-ft.* |
| Feb. 7 | G. R. Shuey | 1.7 | Feb. 10 | R. B. Post | 1.0 |
| Apr. 14 | ....do | 6.2 | 29 | ....do | 1.6 |
| 22 | ....do | 16 | Mar. 11 | ....do | 1.3 |
| May 1 | ....do | 9.8 | Apr. 4 | ....do | 0.7 |
| 10 | ....do | 34 | 17 | ....do | 1.4 |
| 18 | ....do | 32 | 30 | ....do | 6.3 |
| 26 | ....do | 27 | May 8 | ....do | 6.3 |
| June 2 | ....do | 15 | 15 | ....do | 5.4 |
| 12 | ....do | 60 | June 8 | ....do | 8.2 |
| 21 | ....do | 95 | 23 | ....do | 11 |
| 29 | ....do | 70 | July 3 | ....do | 24 |
| July 9 | ....do | 109 | 13 | Post and Lamb | 18 |
| 23 | ....do | 111 | 24 | W. A. Lamb | 17 |
| Sept. 10 | ....do | 11 | Aug. 9 | ....do | 34 |
| Oct. 22 | ....do | 1.2 | 17 | ....do | 18 |
| Nov. 14 | ....do | .3 | Sept. 2 | ....do | 6 |
| Dec. 19 | ....do | 3.4 | Oct. 1 | ....do | 8.5 |
| **1907.** | | | 20 | Barrows and Lamb | 4.7 |
| Jan. 30 | G. R. Shuey | 2.0 | Nov. 3 | ....do | 3.0 |
| Feb. 24 | ....do | 2.7 | 11 | A. T. Barrows | 2.5 |
| Mar. 22 | ....do | 3.8 | **1909.** | | |
| Apr. 16 | ....do | 9.7 | Jan. 16 | Haines and Lee | 4.7 |
| May 4 | ....do | 9.1 | Feb. 2 | R. E. Haines | 2.3 |
| 20 | ....do | 13 | 22 | ....do | [a]0 |
| June 5 | ....do | 31 | Mar. 3 | ....do | 2.5 |
| 15 | ....do | 20 | 30 | ....do | 2.1 |
| 27 | ....do | 30 | Apr. 19 | ....do | 11.3 |
| July 9 | ....do | 39 | May 11 | ....do | 16.3 |
| 31 | ....do | 36 | 31 | ....do | 15.9 |
| Aug. 12 | R. B. Post | 23 | June 22 | ....do | 31.6 |
| 28 | ....do | 14 | July 12 | ....do | 43.5 |
| Sept. 11 | ....do | 3.3 | Aug. 5 | ....do | 21.1 |
| 27 | ....do | 3.3 | 24 | ....do | 20.0 |
| Oct. 17 | ....do | 6.1 | Sept. 9 | ....do | 12.7 |
| Nov. 4 | ....do | 4.9 | 28 | ....do | 6.9 |
| 24 | ....do | 4.6 | Oct. 25 | ....do | 2.9 |
| Dec. 14 | ....do | 2.7 | Nov. 16[b] | ....do | 7.4 |

[a] Frozen part of the day. [b] Frozen up at noon. Some flow later.

[1] Described in the 1906 report as near Independence.

*Discharge measurements of Shepard Creek near Thebe, Cal., in 1910–11.*

| Date. | Hydrographer. | North Branch discharge. | South Branch discharge. | Total Shepard Creek discharge. |
|---|---|---|---|---|
| | | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Feb. 25 | R. E. Haines | 1.7 | 0.0 | 1.7 |
| Mar. 15 | ....do | 2.1 | .0 | 2.1 |
| Apr. 5 | ....do | .0 | 2.5 | 2.5 |
| 26 | ....do | 1.4 | 5.2 | 6.6 |
| May 17 | ....do | 6.9 | 4.5 | 11.4 |
| June 21 | C. H. Lee | 9.6 | 3.3 | 12.9 |
| July 16 | F. G. Wood | 3.7 | 15.2 | 18.9 |
| Aug. 11 | ....do | 3.6 | 8.6 | 12.2 |
| 29 | G. T. Peekema | .8 | 7.2 | 5.0 |
| Sept. 30 | ....do | 2.1 | 1.4 | 3.5 |
| Oct. 31 | ....do | 2.0 | 1.8 | 3.8 |
| Dec. 7 | ....do | 1.2 | 1.3 | 2.5 |
| 1911. | | | | |
| Jan. 12 | G. T. Peekema | 2.5 | 2.2 | 4.7 |
| Feb. 23 | ....do | ........ | 1.8 | ........ |

Note.—The discharge past the regular gaging station was determined by adding together the measured discharge of the North and South branches. Measurements of these were made at several sections.

*Monthly discharge of Shepard Creek near Thebe, Cal., for 1906–1909.*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Month. | Mean discharge in second feet. | Run-off (total in acre-feet). |
|---|---|---|---|---|---|
| 1906. | | | 1907–8. | | |
| January | 2.0 | 123 | January | 1.3 | 80 |
| February | 2.0 | 111 | February | 1.3 | 75 |
| March | 2.0 | 123 | March | 1.3 | 80 |
| April | 9.0 | 536 | April | 2.6 | 155 |
| May | 26.5 | 1,630 | May | 6.2 | 381 |
| June | 62.2 | 3,700 | June | 13.4 | 797 |
| July | 104 | 6,400 | July | 22.0 | 1,350 |
| August | 63.0 | 3,870 | August | 21.0 | 1,290 |
| September | 12.0 | 714 | September | 9.6 | 571 |
| The period | ........ | 17,200 | The year | 7.62 | 5,550 |
| 1906–7. | | | 1908–9. | | |
| October | 2.6 | 160 | October | 5.7 | 350 |
| November | .5 | 30 | November | 2.6 | 155 |
| December | 3.0 | 184 | December | 2.0 | 123 |
| January | 2.0 | 123 | January | 4.7 | 289 |
| February | 2.4 | 133 | February | 3.0 | 167 |
| March | 3.4 | 209 | March | 2.5 | 154 |
| April | 8.1 | 482 | April | 8.8 | 524 |
| May | 14.0 | 861 | May | 14.8 | 910 |
| June | 26.0 | 1,550 | June | 37.9 | 2,260 |
| July | 37.0 | 2,280 | July | 42.4 | 2,610 |
| August | 21.0 | 1,290 | August | 20.6 | 1,250 |
| September | 4.7 | 280 | September | 11.0 | 655 |
| The year | 10.4 | 7,580 | The year | 13.0 | 9,450 |
| 1907–8. | | | 1909. | | |
| October | 5.1 | 314 | October | 4.7 | 289 |
| November | 4.7 | 280 | November | 3.0 | 179 |
| December | 2.9 | 178 | December | 3.0 | 184 |

Note.—Discharge determined by interpolating between discharge measurements. Record is only approximate.

## BAIRS CREEK[1] NEAR THEBE, CAL.

No regular gaging station has been maintained on Bairs Creek. All measurements were made at a point about 3 miles east of the mouth of the canyon, in sec. 16, T. 14 S., R. 35 E., above all diversions.

*Discharge measurements of Bairs Creek near Thebe, Cal., in 1906–1911.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1906. | | *Sec.-ft.* | 1908. | | *Sec.-ft.* |
| Apr. 14 | G. R. Shuey | 1.5 | Aug. 9 | W. A. Lamb | 8.2 |
| 22[a] | do | 6.5 | 17 | do | 4.5 |
| May 1[a] | do | 3.9 | Sept. 2 | do | 1.5 |
| 10[a] | do | 14 | Oct. 1 | do | 2.9 |
| 18 | do | 14 | Nov. 12 | A. T. Barrows | 1.7 |
| 26 | do | 15 | | | |
| June 2 | do | 10 | 1909. | | |
| 12 | do | 37 | Jan. 16 | Haines and Lee | 1.00 |
| 21[a] | do | 44 | Feb. 2 | R. E. Haines | .41 |
| 29[a] | do | 27 | 22 | do | (c) |
| July 9 | do | 39 | Mar. 3 | do | 1.48 |
| 23[a] | do | 28 | 30 | do | 1.38 |
| Sept. 10[a] | do | 3.9 | Apr. 19 | do | 10.3 |
| Oct. 22[a] | do | 1.6 | May 11 | do | 13.9 |
| Dec. 19[b] | do | .2 | 31 | do | 17.8 |
| | | | June 22 | do | 20.3 |
| 1907. | | | July 12 | do | 14.1 |
| Mar. 22 | G. R. Shuey | 3.5 | Aug. 5 | do | 6.07 |
| Apr. 16 | do | 7.2 | 24 | do | 3.99 |
| May 20 | do | 9.6 | Sept. 9 | do | 2.86 |
| June 5 | do | 14 | 28 | do | 1.85 |
| 15 | do | 10 | Oct. 25 | do | .92 |
| 27 | do | 13 | Nov. 16[d] | do | 1.51 |
| July 9 | do | 15 | | | |
| 31 | do | 5.9 | 1910. | | |
| Aug. 12 | R. B. Post | 4.4 | Feb. 25 | R. E. Haines | .14 |
| 28 | do | 3.9 | Mar. 15 | do | .26 |
| Sept. 11 | do | .6 | Apr. 5 | do | .12 |
| Oct. 17 | do | 1.8 | 26 | do | 1.9 |
| Nov. 4 | do | 2.6 | May 17 | do | 8.6 |
| 24 | do | 1.6 | June 21 | C. H. Lee | 4.8 |
| Dec. 14 | do | 15 | July 16 | do | 3.3 |
| | | | Aug. 11 | F. G. Wood | 1.6 |
| 1908. | | | 29 | do | 1.0 |
| Feb. 10 | R. B. Post | .0 | Sept. 30 | G. T. Peekema | .38 |
| Apr. 17 | do | .9 | Oct. 31 | do | .35 |
| 30 | do | 2.8 | Dec. 7 | do | .61 |
| May 8 | do | 4.9 | | | |
| 15 | do | 3.8 | 1911. | | |
| June 23 | do | 6.2 | Jan. 12 | | 1.2 |
| July 3 | do | 3.7 | Feb. 23 | | .9 |

[a] Measured at diversion gates.
[b] Estimated.
[c] No flow; frozen up at 12.30 p. m; ran later.
[d] Creek frozen up at 11 a. m.

*Monthly discharge of Bairs Creek near Thebe, Cal., for 1906–1909.*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). |
|---|---|---|---|---|---|
| 1906. | | | 1906–7. | | |
| January | 1.0 | 61 | January | 1.0 | 61 |
| February | 1.0 | 56 | February | 1.0 | 56 |
| March | 1.0 | 61 | March | 3.0 | 184 |
| April | 3.2 | 190 | April | 7.0 | 417 |
| May | 12.5 | 769 | May | 9.6 | 590 |
| June | 31.3 | 1,860 | June | 12.2 | 726 |
| July | 30.3 | 1,860 | July | 11.7 | 719 |
| August | 13.4 | 824 | August | 4.4 | 270 |
| September | 4.3 | 256 | September | 1.1 | 65 |
| The period | | 5,940 | The year | 4.54 | 3,300 |
| 1906–7. | | | 1907–8. | | |
| October | 2.0 | 123 | October | 1.7 | 104 |
| November | 1.0 | 60 | November | 2.1 | 125 |
| December | .5 | 31 | December | 1.5 | 92 |

[1] Called Moffett Creek in the 1906 report.

*Monthly discharge of Bairs Creek near Thebe, Cal., for 1906–1909*—Continued.

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). |
|---|---|---|---|---|---|
| **1907–8.** | | | **1908–9.** | | |
| January | 1.0 | 61 | January | 1.0 | 61 |
| February | .0 | 0 | February | .5 | 28 |
| March | .0 | 0 | March | 1.5 | 92 |
| April | 1.2 | 71 | April | 7.7 | 458 |
| May | 3.0 | 184 | May | 13.0 | 799 |
| June | 4.0 | 238 | June | 24.0 | 1,430 |
| July | 4.5 | 277 | July | 15.2 | 935 |
| August | 4.0 | 246 | August | 5.0 | 307 |
| September | 1.6 | 95 | September | 3.9 | 232 |
| The year | 2.05 | 1,490 | The year | 6.28 | 4,560 |
| **1908–9.** | | | **1909.** | | |
| October | 1.4 | 86 | October | 1.2 | 72 |
| November | 1.2 | 71 | November | 1.0 | 60 |
| December | 1.0 | 61 | December | 1.0 | 61 |

NOTE.—Discharge determined by comparison with neighboring streams and by interpolating between discharge measurements. Record is only approximate.

## GEORGE CREEK NEAR THEBE, CAL.[1]

A gage has been placed on George Creek at a point about 1 mile west of the road from Independence to Lone Pine, in sec. 27, T. 14 S., R. 35 E.

No water is diverted above the gage.

No gage-height record is available, but the following discharge measurements were made near the gage:

*Discharge measurements of George Creek near Thebe, Cal., in 1906–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1906. | | *Feet.* | *Sec.-ft.* | 1908. | | *Feet.* | *Sec.-ft.* |
| Feb. 7 | G. R. Shuey | | 1.0 | Feb. 10 | R. B. Post | .68 | 1.5 |
| Apr. 14 | do | | 5.1 | 20 | do | .75 | 1.7 |
| 22 | do | | 14 | Mar. 11 | do | .75 | 1.8 |
| May 1 | do | | 7.4 | Apr. 4 | do | .80 | 2.6 |
| 10 | do | | 21 | 17 | do | .82 | 2.9 |
| 18 | do | | 28 | 30 | do | 1.18 | 14 |
| 28 | do | | 20 | May 8 | do | 1.03 | 8.6 |
| June 12 | do | | 53 | 15 | do | .96 | 6.1 |
| 29 | do | | 66 | June 8 | do | .85 | 6.9 |
| July 9 | do | | 84 | 23 | do | 1.09 | 12 |
| 23 | do | | 102 | July 3 | do | 1.20 | 19 |
| Aug. 10 | do | | 42 | 13 | Post and Lamb | 1.15 | 18 |
| Oct. 22 | do | | 4.5 | 24 | W. A. Lamb | 1.10 | 14 |
| 30 | do | | 3.1 | Aug. 9 | do | 1.15 | 22 |
| Dec. 19 | do | | 1.6 | 17 | do | .96 | 11 |
| | | | | Sept. 2 | do | .80 | 7.1 |
| 1907. | | | | Oct. 1 | do | .87 | 8.7 |
| Feb. 24 | G. R. Shuey | | 2.7 | 20 | Lamb and Barrows | .75 | 4.0 |
| Mar. 22 | do | 0.95 | 5.6 | 30 | A. T. Barrows | | 5.8 |
| Apr. 16 | do | 1.20 | 12 | Nov. 3 | Lamb and Barrows | .67 | 3.4 |
| May 4 | do | 1.25 | 14 | 12 | A. T. Barrows | .64 | 3.0 |
| 20 | do | 1.35 | 19 | | | | |
| June 15 | do | 1.20 | 16 | 1909. | | | |
| July 9 | do | 1.55 | 33 | Jan. 16 | Haines and Lee | 0.64 | 3.0 |
| Aug. 12 | R. B. Post | 1.20 | 14 | Feb. 2 | R. E. Haines | .55 | 2.0 |
| 28 | do | 1.06 | 8.7 | 22 | do | .58 | 2.4 |
| Sept. 11 | do | .89 | 4.4 | Mar. 3 | do | .63 | 3.5 |
| 27 | do | .79 | 2.0 | 30 | do | .59 | 2.9 |
| Oct. 19 | do | 1.01 | 6.8 | Apr. 19 | do | 1.00 | 14.2 |
| Nov. 4 | do | .99 | 6.1 | May 11 | do | 1.15 | 21.7 |
| 24 | do | .92 | 2.8 | 31 | do | 1.20 | 24.0 |
| Dec. 14 | do | .90 | 2.3 | June 22 | do | 1.40 | 35.1 |

[1] Described in the 1906 report as near Independence.

*Discharge measurements of George Creek near Thebe, Cal., in 1906–1911*—Continued.

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1909. | | *Feet.* | *Sec.-ft.* | 1910. | | *Feet.* | *Sec.-ft.* |
| July 12 | R. E. Haines | 1.35 | 36.2 | May 17 | R. E. Haines | 1.00 | 16 |
| Aug. 5 | do | 1.10 | 15.2 | June 21 | C. H. Lee | 1.00 | 13 |
| 24 | do | 1.06 | 14.3 | July 16 | F. G. Wood | .95 | 11 |
| Sept. 9 | do | .90 | 10.4 | Aug. 11 | do | | 6.4 |
| 28 | do | .76 | 5.2 | 29 | do | .76 | 5.6 |
| Oct. 25 | do | .64 | 2.6 | Sept. 30 | G. T. Peekema | .68 | 3.2 |
| Nov. 16 | do | .60 | 1.9 | Oct. 31 | do | .83 | 4.9 |
| | | | | Dec. 7 | do | .70 | 2.6 |
| 1910. | | | | | | | |
| Feb. 25 | R. E. Haines | .53 | 1.1 | 1911. | | | |
| Mar. 15 | do | .65 | 3.0 | Jan. 12 | | | 2.9 |
| Apr. 5 | do | .61 | 2.4 | Feb. 23 | | | 1.9 |
| 26 | do | .94 | 11 | | | | |

*Monthly discharge of George Creek near Thebe, Cal., for 1906–1909.*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). |
|---|---|---|---|---|---|
| 1906. | | | 1907-8. | | |
| January | 1.0 | 61 | January | 2.7 | 166 |
| February | 1.0 | 56 | February | 1.9 | 109 |
| March | 2.0 | 123 | March | 2.2 | 135 |
| April | 10.3 | 613 | April | 5.3 | 315 |
| May | 21.1 | 1,300 | May | 8.0 | 492 |
| June | 52.9 | 3,150 | June | 11.0 | 655 |
| July | 86.9 | 5,340 | July | 18.0 | 1,110 |
| August | 42.3 | 2,600 | August | 14.0 | 861 |
| September | 21.0 | 1,250 | September | 8.1 | 482 |
| The period | | 14,500 | The year | 6.88 | 5,010 |
| 1906-7. | | | 1908-9. | | |
| October | 7.7 | 473 | October | 6.0 | 369 |
| November | 2.6 | 155 | November | 3.2 | 190 |
| December | 1.7 | 105 | December | 3.0 | 184 |
| January | 2.0 | 123 | January | 2.8 | 172 |
| February | 2.5 | 139 | February | 2.3 | 128 |
| March | 5.0 | 307 | March | 3.2 | 197 |
| April | 11.0 | 655 | April | 11.4 | 678 |
| May | 17.0 | 1,040 | May | 19.4 | 1,190 |
| June | 19.0 | 1,130 | June | 43.7 | 2,600 |
| July | 28.0 | 1,720 | July | 38.4 | 2,360 |
| August | 13.0 | 799 | August | 14.7 | 904 |
| September | 4.0 | 238 | September | 8.7 | 518 |
| The year | 9.46 | 6,880 | The year | 13.1 | 9,490 |
| 1907-8. | | | 1909. | | |
| October | 5.2 | 320 | October | 3.5 | 215 |
| November | 3.8 | 226 | November | 2.0 | 119 |
| December | 2.3 | 141 | December | 1.9 | 117 |

NOTE.—Discharge determined by comparison with neighboring streams and by interpolating between discharge measurements. Record is only approximate.

## [illegible], CAL.

[illegible] about three-fourths of a [illegible] about 50 feet above the [illegible] sec. 2, T. 1 [illegible] 8 [illegible] was established [illegible] and discontinued February 28, 1911.

[illegible]

[illegible] the [illegible] bank at the [illegible].

[illegible]

The drainage area above the mouth of the canyon is about [illegible] square miles.

[illegible] banks [illegible] and [illegible] not subject to overflow. The channel is composed of gravel and bowlders and shifts somewhat at [illegible]. The results may be considered good.

*[illegible] measurements of [illegible] Cal., in 190[illegible]–191[illegible].*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | | Feet. | Sec.-ft. | [illegible] | | Feet. | Sec.-ft. |
| [illegible] | [illegible] | | [illegible] | June [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | do. | [illegible].9 | [illegible] |
| [illegible] | [illegible] | | [illegible] | July [illegible] | do. | [illegible].0 | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible].0 | [illegible] |
| [illegible] | [illegible] | | [illegible] | Aug. [illegible] | do. | [illegible].4 | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | do. | [illegible].5 | [illegible] |
| [illegible] | [illegible] | | [illegible] | Sept. [illegible] | do. | [illegible].0 | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | do. | [illegible].9 | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | Oct. [illegible] | do. | [illegible].4 | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | Nov. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | | | | |
| [illegible] | [illegible] | | [illegible] | [illegible] | | | |
| [illegible] | [illegible] | | [illegible] | Jan. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | Feb. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | Mar. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Apr. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | May [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| | | | | June [illegible] | do. | [illegible] | [illegible] |
| [illegible] | | | | July [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Aug. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Sept. 4 | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Oct. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Nov. [illegible] | do. | 2.[illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | 1910. | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | Mar. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Apr. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | May [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 24 | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | June [illegible] | C. H. Lee | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | July 21 | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Aug. [illegible] | F. [illegible] Wood | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Sept. [illegible] | do. | [illegible] | [illegible] |
| | | | | [illegible] | G. T. [illegible] | [illegible] | [illegible] |
| [illegible] | | | | Oct. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Nov. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | 1911. | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | Jan. [illegible] | G. T. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Feb. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |

a Change in channel section.

*Daily gage height, in feet, of Lone Pine Creek near Lone Pine, Cal., for 1906–1911.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | | | | | | | |
| 1 | 1.89 | | 1.7 | 1.8 | | 1.8 | 1.7 | | | 2.8 | | |
| 2 | | 1.7 | | | 1.7 | | | | 2.5 | | | 2.4 |
| 3 | 1.89 | | 1.7 | 1.8 | | 1.8 | 1.7 | | | | 2.6 | |
| 4 | | 1.7 | | | 1.7 | | | | | 3.0 | | |
| 5 | 1.89 | | 1.7 | 1.8 | | 1.8 | 2.0 | | 2.6 | | | 2.4 |
| 6 | | 1.7 | | | 1.7 | | | | | | 2.6 | |
| 7 | | | 1.7 | 1.8 | | 1.8 | 2.0 | | | 3.0 | | |
| 8 | 1.89 | 1.7 | | | 1.7 | | | | 2.45 | | | 2.4 |
| 9 | | | 1.7 | | | 1.8 | 2.0 | | | | 2.5 | |
| 10 | 1.83 | | | 1.8 | 1.7 | | | | | 2.8 | | |
| 11 | | | 1.7 | | | 1.6 | 2.0 | | 2.5 | | | 2.4 |
| 12 | 1.81 | 1.7 | | 1.8 | | | | | | | 2.4 | |
| 13 | | | 1.7 | 1.8 | | 1.6 | 2.0 | | | 2.8 | | |
| 14 | | | | | 1.7 | | | | 2.4 | | | 2.4 |
| 15 | | 1.7 | 1.7 | 1.8 | | 1.8 | 2.0 | | | | 2.4 | |
| 16 | | | | | | | | | | 2.6 | | |
| 17 | | | 1.7 | 1.7 | 1.7 | 1.8 | 2.05 | | 2.2 | | | 2.4 |
| 18 | | | | | | | | | | | 2.4 | |
| 19 | | 1.7 | 1.7 | 1.7 | 1.7 | 1.8 | 2.2 | | | 2.7 | | |
| 20 | | 1.7 | | 1.7 | | | | | 2.3 | | | 2.2 |
| 21 | | 1.7 | 1.7 | 1.7 | 1.7 | 1.8 | 2.15 | | | | 2.4 | |
| 22 | | | | | | | | | | 2.7 | | |
| 23 | 1.8 | 1.7 | 1.7 | 1.7 | 1.7 | 1.8 | 2.2 | | 2.6 | | | 2.2 |
| 24 | | | | | | | | | | 2.7 | 2.3 | |
| 25 | | 1.7 | 1.7 | 1.7 | 1.7 | 1.8 | 2.2 | | | 2.7 | | |
| 26 | | | | | | | | | 2.8 | | | 2.1 |
| 27 | | | 1.7 | 1.7 | 1.7 | 1.8 | 2.2 | | | | 2.2 | |
| 28 | | 1.7 | | | | | | | | 2.5 | | |
| 29 | | | 1.7 | 1.7 | | 1.8 | 2.1 | | 2.8 | | 2.6 | 2.0 |
| 30 | | 1.7 | | | | | | | | | 2.8 | |
| 31 | | | 1.7 | 1.7 | | 1.8 | | | | 2.6 | | |
| 1907–8. | | | | | | | | | | | | |
| 1 | | 2.7 | 2.2 | | 2.05 | | 2.3 | 2.55 | | 3.0 | | |
| 2 | 2.1 | | | | | 2.1 | | | | | | 2.6 |
| 3 | | | | 2.05 | | | | | 2.65 | | 3.75 | |
| 4 | | 2.65 | 2.2 | | 2.0 | | 2.3 | 2.65 | | 3.05 | | |
| 5 | 2.3 | | | | | 2.1 | | | | | | 2.6 |
| 6 | | | | 2.05 | | | | | 2.65 | | 3.75 | |
| 7 | | 2.6 | 2.2 | | 2.0 | | 2.25 | 2.65 | | 3.1 | | |
| 8 | 2.3 | | | | | 2.1 | | | | | | 3.0 |
| 9 | | | | 2.05 | | | | | 2.8 | | 3.55 | |
| 10 | | 2.6 | 2.2 | | 2.05 | | 2.3 | 2.7 | | 3.15 | | |
| 11 | 2.3 | | | | | 2.15 | | | | | | 3.0 |
| 12 | | | | 2.05 | | | | | 2.9 | | 3.5 | |
| 13 | | 2.3 | 2.1 | | 2.1 | | 2.3 | 2.65 | | 3.2 | | |
| 14 | 2.3 | | | | | 2.15 | | | | | | 2.8 |
| 15 | | | | 2.0 | | | | | 2.95 | | 3.4 | |
| 16 | | 2.2 | 2.1 | | 2.1 | | 2.4 | 2.6 | | 3.2 | | |
| 17 | 2.6 | | | | | 2.2 | | | | | | 2.65 |
| 18 | | | | 2.0 | | | | | 3.0 | | 3.3 | |
| 19 | | 2.2 | 2.1 | | 2.1 | | 2.4 | 2.5 | | 3.1 | | |
| 20 | 2.5 | | | | | 2.2 | | | | | | 2.6 |
| 21 | | | | 2.0 | | | | | 3.0 | | 2.7 | |
| 22 | | 2.2 | 2.1 | | 2.35 | | 2.45 | 2.45 | | 3.0 | | |
| 23 | 2.6 | | | | | 2.25 | | | | | | 2.6 |
| 24 | | | | 2.2 | | | | | 3.05 | | 2.7 | |
| 25 | | 2.2 | 2.05 | | 2.2 | | 2.5 | 2.5 | | 3.0 | | |
| 26 | 2.75 | | | | | 2.25 | | | | | | 2.8 |
| 27 | | | | 2.2 | | | | | 3.05 | | 2.6 | |
| 28 | | 2.15 | 2.1 | | 2.1 | | 2.5 | 2.55 | | 3.0 | | |
| 29 | 2.7 | | | | | 2.25 | | | | | | 2.75 |
| 30 | | | | | | | | | 3.1 | | 2.6 | |
| 31 | | | 2.1 | | | | | 2.65 | | 3.0 | | |
| 1908–9. | | | | | | | | | | | | |
| 1 | | 2.45 | 2.25 | | | 2.25 | | | | | 2.85 | |
| 2 | 2.6 | | | | 2.15 | | | | 3.3 | 3.6 | | |
| 3 | | | | 2.15 | | | 2.25 | 2.85 | | | | 2.75 |
| 4 | | 2.35 | 2.25 | | | 2.2 | | | | | 2.8 | |
| 5 | 2.5 | | | | 2.15 | | | 2.9 | 3.7 | 3.4 | | |
| 6 | | | | 2.15 | | | 2.3 | 2.95 | | | | 2.7 |
| 7 | | 2.35 | 2.25 | | | 2.2 | | | | | 2.75 | |
| 8 | 2.5 | | | | 2.25 | | | | 3.6 | 3.35 | | |
| 9 | | | | 2.15 | | | 2.3 | 2.9 | | | | 2.55 |
| 10 | | 2.35 | 2.25 | | | 2.2 | | | | | 2.75 | |

*Daily gage height, in feet, of Lone Pine Creek near Lone Pine, Cal., for 1908–1911*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | | | | |
| 11 | 2.45 | | | | 2.8 | | | | 3.4 | 3.2 | | |
| 12 | | | | 2.15 | | | 2.3 | 2.9 | | | | 2.6 |
| 13 | | 2.35 | 2.3 | | | 2.2 | | | | | 2.75 | |
| 14 | 2.45 | | | | 2.3 | | | | 3.7 | 3.3 | | 2.45 |
| 15 | | | | 2.4 | | | 2.35 | 2.8 | | | | 2.45 |
| 16 | | 2.3 | 2.3 | | | 2.2 | | | | | 2.75 | |
| 17 | 2.45 | | | | 2.25 | | | | 3.4 | 3.3 | | |
| 18 | | | | 2.35 | | | 2.6 | 2.7 | | | 3.1 | 2.3 |
| 19 | | 2.25 | 2.25 | | | 2.2 | | | | | 3.3 | |
| 20 | 2.45 | | | | 2.25 | | | | 3.3 | 3.2 | | |
| 21 | | | | 2.35 | | | 2.5 | 2.85 | | | | 2.3 |
| 22 | | 2.25 | 2.15 | | | 2.2 | | | | | 2.9 | |
| 23 | 2.45 | | | | 2.25 | | | | 3.35 | 3.0 | | |
| 24 | | | | 2.3 | | | 2.6 | 2.8 | | | | 2.3 |
| 25 | | 2.2 | 2.15 | | | 2.2 | | 2.8 | | | 2.75 | |
| 26 | 2.45 | | | | 2.2 | 2.2 | | | 3.5 | 3.05 | | |
| 27 | | | | 2.25 | | 2.2 | 2.6 | 2.9 | | | | 2.3 |
| 28 | | 2.25 | 2.15 | | | 2.2 | | | | | 2.9 | |
| 29 | 2.45 | | | | | | | | 3.7 | 3.1 | | |
| 30 | | | | 2.2 | | | 2.75 | 3.0 | | | | 2.25 |
| 31 | | | 2.15 | | | | | | | | 2.75 | |
| 1909–10. | | | | | | | | | | | | |
| 1 | | | | 2.0 | | | 1.9 | | | | | 2.35 |
| 2 | | 1.9 | 2.0 | | | 1.9 | | | 3.0 | 2.6 | 2.75 | |
| 3 | 2.2 | | | | 2.1 | | | 2.3 | | | | |
| 4 | | | | 2.0 | | | 1.9 | | | | | 2.25 |
| 5 | | 1.95 | 2.0 | | | 1.9 | | | 2.95 | 2.5 | 2.7 | |
| 6 | 2.2 | | | | 2.1 | | | 2.35 | | | | |
| 7 | | | | 2.0 | | | 2.0 | | | | | 2.3 |
| 8 | | 2.0 | 2.1 | | | 1.9 | | | 2.95 | 2.6 | 2.65 | |
| 9 | 2.1 | | | | 2.1 | | | 2.35 | | | | |
| 10 | | | | 1.9 | | | 2.0 | | | | | 2.2 |
| 11 | | 2.05 | 2.1 | | | 1.9 | | | 2.9 | 2.6 | 2.6 | |
| 12 | 2.1 | | | | 2.2 | | | 2.5 | | | | |
| 13 | | | | 1.9 | | | 2.05 | | | | | 2.2 |
| 14 | | 2.05 | 2.0 | | | 2.0 | | | 2.75 | 2.65 | 2.6 | |
| 15 | 2.05 | | | | 2.1 | | | 2.5 | | | | |
| 16 | | | | 1.9 | | | 2.05 | | | | | 2.75 |
| 17 | | 2.0 | 2.0 | | | 2.0 | | | 2.6 | 2.65 | 2.5 | |
| 18 | 2.0 | | | | 1.9 | | 2.1 | 2.6 | | | | |
| 19 | | | | 1.9 | | | | | | | | 2.6 |
| 20 | | 2.0 | 2.0 | | | 2.0 | | | 2.6 | | 2.45 | |
| 21 | 2.0 | | | | 1.9 | | 2.2 | 2.65 | | 3.05 | | |
| 22 | | | | 2.0 | | | | | | | | 2.45 |
| 23 | | 2.0 | 2.0 | | | 1.9 | | | 2.6 | | 2.5 | |
| 24 | 2.0 | | | | 1.9 | | 2.3 | 2.65 | | 2.95 | | |
| 25 | | | | 1.9 | | | | | | | | 2.3 |
| 26 | | 2.0 | 2.0 | | | 1.9 | | | 2.6 | | 2.5 | |
| 27 | 1.95 | | | | 1.9 | | 2.4 | 2.65 | | 3.0 | 2.5 | |
| 28 | | | | 1.9 | | | | | | | | 2.25 |
| 29 | | 2.0 | 1.9 | | | 1.9 | | | 2.6 | 2.8 | 2.55 | |
| 30 | 1.9 | | | | | | 2.3 | 3.1 | | | 2.55 | |
| 31 | | | | 1.9 | | | | | | | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 2.2 | | | | 2.2 | 16 | 2.2 | | | | 2.1 |
| 2 | | | | 2.0 | | 17 | | | | 1.95 | |
| 3 | | 2.1 | 2.0 | | | 18 | | 2.0 | 2.1 | | |
| 4 | 2.2 | | | | 2.4 | 19 | 2.2 | | | | 2.05 |
| 5 | | | | 2.0 | | 20 | | | | 1.95 | |
| 6 | | 2.05 | 2.0 | | | 21 | | 2.0 | 2.1 | | |
| 7 | 2.2 | | | | 2.2 | 22 | 2.2 | | | | 2.0 |
| 8 | | | | 1.95 | | 23 | | | | 1.95 | |
| 9 | | 2.0 | 2.0 | | | 24 | | 2.0 | 2.1 | | |
| 10 | 2.1 | | | | 2.05 | 25 | 2.25 | | | | 1.95 |
| 11 | | | | 1.95 | | 26 | | | | 1.95 | |
| 12 | | 2.0 | 2.0 | | | 27 | | 2.0 | 2.0 | | |
| 13 | 2.35 | | | | 2.05 | 28 | 2.3 | | | | 1.95 |
| 14 | | | | 1.95 | | 29 | | | | 2.3 | |
| 15 | ... | 2.0 | 2.0 | | | 30 | | 2.0 | 2.0 | | |
| | | | | | | 31 | | | | | |

*Daily discharge, in second-feet, of Lone Pine Creek near Lone Pine, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1909.** | | | | | | | | | |
| 1 | 5.2 | 5.5 | 7.0 | 6.8 | 26 | 58 | 111 | 44 | 36 |
| 2 | 5.2 | 5.2 | 6.6 | 6.9 | 28 | 66 | 108 | 42 | 36 |
| 3 | 5.2 | 5.2 | 6.3 | 7.0 | 30 | 78 | 102 | 41 | 36 |
| 4 | 5.2 | 5.2 | 6.0 | 7.3 | 32 | 91 | 96 | 40 | 35 |
| 5 | 5.2 | 5.2 | 6.0 | 7.6 | 33 | 104 | 89 | 39 | 34 |
| 6 | 5.2 | 5.8 | 6.0 | 8.0 | 37 | 105 | 88 | 37 | 33 |
| 7 | 5.2 | 6.6 | 6.0 | 8.0 | 36 | 107 | 86 | 36 | 30 |
| 8 | 5.2 | 7.0 | 6.0 | 8.0 | 34 | 108 | 84 | 36 | 26 |
| 9 | 5.2 | 14 | 6.0 | 8.0 | 33 | 102 | 80 | 36 | 24 |
| 10 | 5.2 | 21 | 6.0 | 8.0 | 33 | 96 | 75 | 36 | 25 |
| 11 | 5.2 | 27 | 6.0 | 8.0 | 33 | 89 | 71 | 36 | 26 |
| 12 | 5.2 | 20 | 6.0 | 8.0 | 33 | 98 | 74 | 36 | 27 |
| 13 | 7.0 | 14 | 6.0 | 8.4 | 31 | 108 | 77 | 36 | 24 |
| 14 | 8.8 | 8.0 | 6.0 | 8.8 | 29 | 118 | 80 | 36 | 20 |
| 15 | 10 | 7.6 | 6.0 | 9.2 | 27 | 108 | 80 | 36 | 20 |
| 16 | 9.7 | 7.3 | 6.0 | 12 | 26 | 98 | 80 | 36 | 18 |
| 17 | 9.4 | 7.0 | 6.0 | 14 | 24 | 89 | 80 | 50 | 16 |
| 18 | 9.2 | 7.0 | 6.0 | 17 | 22 | 86 | 77 | 63 | 14 |
| 19 | 9.2 | 7.0 | 6.0 | 16 | 25 | 83 | 74 | 80 | 14 |
| 20 | 9.2 | 7.0 | 6.0 | 14 | 28 | 80 | 71 | 69 | 14 |
| 21 | 9.2 | 7.0 | 6.0 | 13 | 30 | 82 | 66 | 58 | 14 |
| 22 | 8.8 | 7.0 | 6.0 | 14 | 29 | 83 | 60 | 47 | 14 |
| 23 | 8.4 | 7.0 | 6.0 | 16 | 28 | 84 | 55 | 44 | 14 |
| 24 | 8.0 | 6.6 | 6.0 | 17 | 27 | 90 | 56 | 40 | 14 |
| 25 | 7.7 | 6.3 | 6.0 | 17 | 27 | 94 | 58 | 36 | 14 |
| 26 | 7.4 | 6.0 | 6.0 | 17 | 30 | 98 | 59 | 40 | 14 |
| 27 | 7.0 | 6.3 | 6.0 | 17 | 33 | 104 | 60 | 44 | 14 |
| 28 | 6.6 | 6.6 | 6.0 | 19 | 36 | 111 | 62 | 47 | 14 |
| 29 | 6.3 | ........ | 6.2 | 22 | 38 | 118 | 63 | 44 | 14 |
| 30 | 6.0 | ........ | 6.4 | 24 | 41 | 114 | 56 | 40 | 13 |
| 31 | 5.8 | ........ | 6.6 | ........ | 50 | ........ | 50 | 36 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 1 | 13 | 6.5 | 7.8 | 7.5 | 7.0 | 5.8 | 5.8 | 15.0 | 44 | 26 | 30 | 12.8 |
| 2 | 12 | 6.5 | 7.8 | 7.5 | 8.2 | 5.8 | 5.8 | 15.0 | 42 | 26 | 29 | 12.8 |
| 3 | 12 | 6.8 | 7.8 | 7.5 | 9.5 | 5.8 | 5.8 | 15.0 | 41 | 25 | 28 | 12.8 |
| 4 | 12 | 7.0 | 7.8 | 7.5 | 9.5 | 5.8 | 5.8 | 15.6 | 40 | 23 | 27 | 12.8 |
| 5 | 12 | 7.2 | 7.8 | 7.5 | 9.5 | 5.8 | 6.3 | 16.2 | 40 | 22 | 26 | 12.2 |
| 6 | 12 | 7.4 | 8.4 | 7.5 | 9.5 | 5.8 | 6.9 | 16.8 | 40 | 23 | 25 | 11.6 |
| 7 | 11 | 7.6 | 9.0 | 7.5 | 9.5 | 5.8 | 7.5 | 16.8 | 40 | 25 | 25 | 11.0 |
| 8 | 10 | 7.8 | 9.7 | 6.9 | 9.5 | 5.8 | 7.5 | 16.8 | 40 | 26 | 24 | 10.2 |
| 9 | 9.7 | 8.2 | 9.7 | 6.3 | 9.5 | 5.8 | 7.5 | 16.8 | 39 | 26 | 23 | 9.4 |
| 10 | 9.7 | 8.5 | 9.7 | 5.8 | 10.3 | 5.8 | 7.5 | 18.5 | 39 | 26 | 23 | 8.7 |
| 11 | 9.7 | 8.8 | 9.7 | 5.8 | 11.1 | 5.8 | 7.8 | 20 | 38 | 26 | 22 | 8.7 |
| 12 | 9.7 | 8.8 | 9.2 | 5.8 | 12.0 | 6.3 | 8.1 | 22 | 36 | 27 | 22 | 8.7 |
| 13 | 9.4 | 8.8 | 8.6 | 5.8 | 11.1 | 6.9 | 8.5 | 22 | 34 | 27 | 22 | 8.7 |
| 14 | 9.1 | 8.8 | 7.8 | 5.8 | 10.3 | 7.5 | 8.5 | 22 | 32 | 28 | 22 | 15.4 |
| 15 | 8.8 | 8.4 | 7.8 | 5.8 | 9.5 | 7.5 | 8.5 | 22 | 30 | 28 | 21 | 22 |
| 16 | 8.5 | 8.1 | 7.8 | 5.8 | 8.2 | 7.5 | 8.5 | 23 | 28 | 28 | 19 | 29 |
| 17 | 8.2 | 7.8 | 7.8 | 5.8 | 7.0 | 7.5 | 9.0 | 25 | 26 | 28 | 18.0 | 26 |
| 18 | 7.8 | 7.8 | 7.8 | 5.8 | 5.8 | 7.5 | 9.5 | 26 | 26 | 32 | 17.4 | 24 |
| 19 | 7.8 | 7.8 | 7.8 | 5.8 | 5.8 | 7.5 | 10.3 | 26 | 26 | 36 | 16.8 | 22 |
| 20 | 7.8 | 7.8 | 7.8 | 6.3 | 5.8 | 7.5 | 11.1 | 28 | 26 | 40 | 16.2 | 20 |
| 21 | 7.8 | 7.8 | 7.8 | 6.9 | 5.8 | 6.9 | 12.0 | 28 | 26 | 45 | 16.8 | 18.1 |
| 22 | 7.8 | 7.8 | 7.8 | 7.5 | 5.8 | 6.3 | 13.0 | 28 | 26 | 43 | 17.4 | 16.2 |
| 23 | 7.8 | 7.8 | 7.8 | 6.9 | 5.8 | 5.8 | 14.0 | 28 | 26 | 41 | 18.0 | 14.4 |
| 24 | 7.8 | 7.8 | 7.8 | 6.3 | 5.8 | 5.8 | 15.0 | 28 | 26 | 39 | 18.0 | 12.7 |
| 25 | 7.6 | 7.8 | 7.8 | 5.8 | 5.8 | 5.8 | 16.2 | 28 | 26 | 40 | 18.0 | 11.0 |
| 26 | 7.4 | 7.8 | 7.8 | 5.8 | 5.8 | 5.8 | 17.3 | 28 | 26 | 41 | 18.0 | 10.6 |
| 27 | 7.2 | 7.8 | 7.4 | 5.8 | 5.8 | 5.8 | 18.5 | 28 | 26 | 42 | 18.0 | 10.2 |
| 28 | 7.0 | 7.8 | 7.0 | 5.8 | 5.8 | 5.8 | 17.3 | 34 | 26 | 37 | 19.0 | 9.8 |
| 29 | 6.8 | 7.8 | 6.5 | 5.8 | ........ | 5.8 | 16.2 | 40 | 26 | 32 | 20 | 9.4 |
| 30 | 6.5 | 7.8 | 6.5 | 5.8 | ........ | 5.8 | 15.0 | 47 | 26 | 31 | 20 | 9.0 |
| 31 | 6.5 | ........ | 6.5 | 5.8 | ........ | 5.8 | ........ | 45 | ........ | 30 | 16.4 | ........ |

*Daily discharge, in second-feet, of Lone Pine Creek near Lone Pine, Cal., for 1909–1911—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | 1910–11. | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16 | [illegible] | [illegible] | [illegible] | 4.5 | 6.8 |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 17 | [illegible] | [illegible] | [illegible] | 4.5 | 6.6 |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 18 | [illegible] | [illegible] | [illegible] | 4.5 | 6.4 |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19 | [illegible] | [illegible] | [illegible] | 4.5 | 6.2 |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20 | [illegible] | [illegible] | [illegible] | 4.5 | 6.0 |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | [illegible] | [illegible] | [illegible] | 4.5 | 5.8 |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22 | [illegible] | [illegible] | [illegible] | 4.5 | 5.5 |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | [illegible] | [illegible] | [illegible] | 4.5 | 5.2 |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] | 4.5 | 4.9 |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25 | [illegible] | [illegible] | [illegible] | 4.5 | 4.5 |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 26 | [illegible] | [illegible] | [illegible] | 4.5 | 4.5 |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 27 | [illegible] | [illegible] | [illegible] | 4.5 | 4.5 |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | [illegible] | [illegible] | [illegible] | 7.0 | 4.5 |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 29 | [illegible] | [illegible] | [illegible] | 11 | ........ |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | [illegible] | [illegible] | [illegible] | 16 | ........ |
| | | | | | | 31 | [illegible] | ........ | [illegible] | 21 | ........ |

NOTE.—Daily discharge determined from fairly well-defined rating curves applicable as follows: Jan. 9 to [illegible] Discharge interpolated or estimated for days on which gage was not read.

*Monthly discharge of Lone Pine Creek near Lone Pine, Cal., for 1906–1911.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| 1906. | | | | | |
| January | ........ | ........ | a3.3 | 184 | |
| February | [illegible] | [illegible] | [illegible] | 161 | |
| March | [illegible] | [illegible] | [illegible] | 234 | |
| April | 14 | 4.5 | [illegible] | 425 | |
| May | 40 | 15 | 28.5 | 1,730 | |
| June | [illegible] | 42 | 73.5 | 4,370 | |
| July | [illegible] | 96 | 129 | 7,930 | |
| August | [illegible] | 44 | 68.4 | 4,210 | |
| September | 43 | 17 | 27.2 | 1,620 | |
| The period | ........ | ........ | ........ | 20,900 | |
| 1906–7. | | | | | |
| October | 16 | 12 | 14 | 961 | |
| November | 9 | 9 | 8 | 476 | |
| December | 9 | 9 | 8 | 492 | |
| January | 9.5 | 6.5 | 8.2 | 504 | C. |
| February | 8.5 | 5.5 | 6.5 | 361 | C. |
| March | 9.5 | 4.0 | 8.8 | 541 | C. |
| April | 27 | 6.5 | 19.5 | 1,160 | C. |
| May | ........ | ........ | a30.0 | 1,840 | C. |
| June | 65 | 27 | 45.6 | 2,710 | C. |
| July | 80 | 44 | 61.5 | 3,780 | C. |
| August | 51 | 28 | 39.5 | 2,430 | C. |
| September | 23 | 7.9 | 11.5 | 684 | C. |
| The year | 80 | 4 | 21.8 | 15,800 | |
| 1907–8. | | | | | |
| October | 38 | 8.1 | 19.6 | 1,210 | C. |
| November | 34 | 8.6 | 16.2 | 964 | C. |
| December | 8.9 | 8.1 | 8.5 | 523 | C. |
| January | ........ | ........ | 8.0 | 492 | D. |
| February | 10 | 7.0 | 7.7 | 443 | C. |
| March | 9.5 | 7.5 | 8.2 | 504 | C. |
| April | 16 | 8.9 | 11.3 | 672 | C. |
| May | 22 | 13 | 17.4 | 1,070 | C. |
| June | 45 | 14 | 32.0 | 1,900 | C. |
| July | 54 | 38 | 44.0 | 2,700 | C. |
| August | 110 | 18 | 58.0 | 3,570 | C. |
| September | 54 | 16 | 24.0 | 1,430 | C. |
| The year | 110 | 7 | 21.2 | 15,500 | |

a Estimated.

*Monthly discharge of Lone Pine Creek near Lone Pine, Cal., for 1906–1911*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1908–9.** | | | | | |
| October | 16 | 10 | 11.3 | 695 | C. |
| November | 10 | 6.5 | 7.6 | 452 | C. |
| December | 7.5 | 5.5 | 6.3 | 387 | C. |
| January | 10 | 5.2 | 6.97 | 429 | B. |
| February | 27 | 5.2 | 8.76 | 487 | B. |
| March | 7.0 | 6.0 | 6.10 | 375 | B. |
| April | 24 | 6.8 | 12.2 | 726 | B. |
| May | 50 | 22 | 31.3 | 1,920 | B. |
| June | 118 | 58 | 95.0 | 5,650 | B. |
| July | 111 | 50 | 75.1 | 4,620 | C. |
| August | 80 | 36 | 43.3 | 2,660 | C. |
| September | 36 | 13 | 21.6 | 1,290 | B. |
| The year | 118 | 5.2 | 27.1 | 19,700 | |
| **1909–10.** | | | | | |
| October | 13 | 6.5 | 9.05 | 556 | B. |
| November | 8.8 | 6.5 | 7.81 | 464 | B. |
| December | 9.7 | 6.5 | 8.01 | 493 | B. |
| January | 7.5 | 5.8 | 6.39 | 303 | C. |
| February | 12 | 5.8 | 8.04 | 447 | C. |
| March | 7.5 | 5.8 | 6.29 | 387 | B. |
| April | 18.5 | 5.8 | 10.4 | 619 | B. |
| May | 47 | 15 | 24.5 | 1,510 | B. |
| June | 44 | 26 | 32.2 | 1,920 | B. |
| July | 45 | 22 | 31.3 | 1,920 | B. |
| August | 30 | 16.2 | 21.2 | 1,300 | B. |
| September | 29 | 8.7 | 14.0 | 833 | B. |
| The year | 47 | 5.8 | 14.9 | 10,800 | |
| **1910–11.** | | | | | |
| October | 12.8 | 6.8 | 9.23 | 568 | B. |
| November | 8 | 5.5 | 5.80 | 345 | B. |
| December | 6.8 | 5.5 | 5.87 | 361 | C. |
| January | 16 | 4.5 | 5.56 | 342 | C. |
| February | 14.5 | 4.5 | 7.00 | 389 | C. |

NOTE.—Discharge determined as follows: February and September, 1906, by interpolating between discharge measurements. The rest of the record from rating curves covering short periods of time.

## TUTTLE CREEK NEAR LONE PINE, CAL.

This station, which was located about 2 miles southwest of Lone Pine, in sec. 32, T. 15 S., R. 36 E., at the point where the stream leaves the foothills and enters the valley, was established February 17, 1906, but gage-height record was not commenced until November 2, 1906, and discontinued February 28, 1911.

The gage is a vertical staff on the right bank at the footbridge 50 feet above the division box which controls the water diverted from this stream.

Discharge measurements were made from the footbridge.

The drainage area above the mouth of the canyon is approximately 7.8 square miles.

As the channel is continually shifting, the estimates have been prepared by the indirect method. The record is rated as approximate.

[illegible]

[illegible]

*Daily gage height, in feet, of Tuttle Creek near Lone Pine, Cal., for 1906–1911*—Contd.

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | |
| 21 | 1.15 | | 1.1 | 1.2 | 1.0 | 1.2 | | | | 1.3 | |
| 22 | | 1.1 | | | | | | | 1.3 | | |
| 23 | 1.15 | | 1.1 | 1.2 | 1.0 | 1.2 | | 1.8 | | | 1.1 |
| 24 | | 1.1 | | | | | | | | 1.3 | |
| 25 | 1.15 | | 1.1 | 1.2 | 1.0 | 1.2 | | | 1.3 | | |
| 26 | | 1.1 | | | | | | 1.7 | | | 1.1 |
| 27 | | | 1.1 | 1.2 | 1.0 | 1.2 | | | 1.25 | 1.2 | |
| 28 | 1.1 | 1.1 | | | | | | | | | |
| 29 | | | 1.1 | | 1.0 | 1.2 | | 1.5 | | | 1.1 |
| 30 | 1.1 | 1.1 | | | | | | | | 1.2 | |
| 31 | | | 1.1 | | 1.0 | | | | 1.5 | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907-8. | | | | | | | | | | | | |
| 1 | | 1.2 | 1.1 | | 1.1 | | 1.3 | 1.25 | | 1.15 | | |
| 2 | 1.0 | | | | | 1.1 | | | | | | 1.1 |
| 3 | | | | 1.05 | | | | | 1.1 | | 1.25 | |
| 4 | | 1.25 | 1.1 | | 1.05 | | 1.3 | 1.25 | | 1.2 | | |
| 5 | 1.2 | | | | | 1.1 | | | | | | 1.1 |
| 6 | | | | 1.05 | | | | | 1.15 | | 1.3 | |
| 7 | | 1.25 | 1.1 | | 1.05 | | 1.25 | 1.25 | | 1.2 | | |
| 8 | 1.1 | | | | | 1.1 | | | | | | 1.1 |
| 9 | | | | 1.05 | | | | | 1.15 | | 1.3 | |
| 10 | | 1.2 | 1.1 | | 1.1 | | 1.3 | 1.3 | | 1.25 | | |
| 11 | 1.1 | | | | | 1.15 | | | | | | 1.5 |
| 12 | | | | 1.05 | | | | | 1.15 | | 1.25 | |
| 13 | | 1.2 | 1.05 | | 1.1 | | 1.3 | 1.25 | | 1.3 | | |
| 14 | 1.1 | | | | | 1.15 | | | | | | 1.15 |
| 15 | | | | 1.0 | | | | | 1.2 | | 1.25 | |
| 16 | | 1.1 | 1.1 | | 1.1 | | 1.4 | 1.2 | | 1.2 | | |
| 17 | 1.25 | | | | | 1.2 | | | | | | 1.1 |
| 18 | | | | 1.0 | | | | | 1.25 | | 1.2 | |
| 19 | | 1.1 | 1.1 | | 1.1 | | 1.4 | 1.0 | | 1.15 | | |
| 20 | 1.1 | | | | | 1.2 | | | | | | 1.1 |
| 21 | | | | 1.0 | | | | | 1.25 | | 1.2 | |
| 22 | | 1.1 | 1.1 | | 1.25 | | 1.15 | 1.0 | | 1.15 | | |
| 23 | 1.2 | | | | | 1.25 | | | | | | 1.1 |
| 24 | | | | 1.2 | | | | | 1.3 | | 1.2 | |
| 25 | | 1.1 | 1.05 | | 1.2 | | 1.2 | 1.05 | | 1.1 | | |
| 26 | 1.25 | | | | | 1.25 | | | | | | 1.15 |
| 27 | | | | 1.2 | | | | | 1.3 | | 1.15 | |
| 28 | | 1.05 | 1.1 | | 1.1 | | 1.2 | 1.1 | | 1.1 | | |
| 29 | 1.2 | | | | | 1.25 | | | | | | 1.1 |
| 30 | | | | | | | | | 1.35 | | 1.15 | |
| 31 | | | 1.1 | | | | | 1.1 | | 1.1 | | |
| 1908-9. | | | | | | | | | | | | |
| 1 | | 1.1 | 1.1 | | | 1.1 | | | | | 1.4 | |
| 2 | 1.1 | | | | .95 | | | | 1.25 | 1.8 | | |
| 3 | | | | 1.05 | | | 1.1 | 1.15 | | | | 1.3 |
| 4 | | 1.1 | 1.1 | | | 1.1 | | | | | 1.3 | |
| 5 | 1.1 | | | | 1.0 | | | | 1.3 | 1.75 | | |
| 6 | | | | 1.05 | | | 1.1 | 1.2 | | | | 1.3 |
| 7 | | 1.1 | 1.1 | | | 1.1 | | 1.2 | | | 1.3 | |
| 8 | 1.05 | | | | .95 | | | | 1.35 | 1.75 | | |
| 9 | | | | 1.05 | | | 1.1 | 1.15 | | | | 1.2 |
| 10 | | 1.1 | 1.1 | | | 1.1 | | | | | 1.3 | |
| 11 | 1.1 | | | | 1.15 | | | | 1.4 | 1.7 | | |
| 12 | | | | 1.05 | | | 1.1 | 1.1 | | | | 1.1 |
| 13 | | 1.1 | 1.1 | | | 1.1 | | | | | 1.3 | |
| 14 | 1.1 | | | | 1.1 | | | | 1.5 | 1.85 | | 1.25 |
| 15 | | | | 1.1 | | | 1.1 | 1.2 | | | | 1.1 |
| 16 | | 1.1 | 1.1 | | | 1.1 | | | | | 1.3 | |
| 17 | 1.1 | | | | 1.1 | | | | 1.6 | 1.8 | | |
| 18 | | | | 1.1 | | | 1.1 | 1.2 | | | 1.4 | 1.1 |
| 19 | | 1.1 | 1.1 | | | 1.1 | | | | | 1.4 | |
| 20 | 1.1 | | | | 1.1 | | | | 1.6 | 1.7 | | |

[illegible]

*Daily discharge, in second-feet, of Tuttle Creek near Lone Pine, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 5 | 4 | 6 | 7 | 7 | 15 | 36 | 16 | 10 |
| 2 | 5 | 4 | 6 | 7 | 8 | 15 | 36 | 16 | 14 |
| 3 | 5 | 4 | 6 | 7 | 10 | 17 | 35 | 12 | 14 |
| 4 | 5 | 4 | 6 | 7 | 12 | 17 | 35 | 12 | 14 |
| 5 | 5 | 5 | 6 | 7 | 12 | 17 | 32 | 12 | 14 |
| 6 | 5 | 5 | 6 | 7 | 12 | 17 | 31 | 12 | 14 |
| 7 | 5 | 4 | 6 | 7 | 12 | 17 | 31 | 13 | 14 |
| 8 | 5 | 4 | 6 | 7 | 12 | 20 | 30 | 13 | 10 |
| 9 | 5 | 5 | 6 | 7 | 10 | 22 | 28 | 13 | 10 |
| 10 | 5 | 7 | 6 | 7 | 9 | 22 | 28 | 13 | 10 |
| 11 | 5 | 8 | 6 | 7 | 9 | 22 | 28 | 13 | 7 |
| 12 | 5 | 7 | 6 | 7 | 9 | 22 | 31 | 13 | 7 |
| 13 | 5 | 7 | 6 | 7 | 9 | 27 | 34 | 14 | 10 |
| 14 | 6 | 7 | 6 | 7 | 12 | 27 | 36 | 14 | 12 |
| 15 | 6 | 7 | 6 | 7 | 12 | 27 | 34 | 14 | 7 |
| 16 | 6 | 7 | 6 | 7 | 13 | 32 | 34 | 14 | 7 |
| 17 | 6 | 8 | 6 | 7 | 13 | 32 | 34 | 16 | 7 |
| 18 | 6 | 8 | 6 | 8 | 13 | 32 | 34 | 19 | 7 |
| 19 | 6 | 7 | 6 | 8 | 13 | 32 | 29 | 19 | 7 |
| 20 | 6 | 7 | 6 | 8 | 13 | 31 | 29 | 14 | 10 |
| 21 | 6 | 7 | 6 | 8 | 15 | 30 | 29 | 10 | 10 |
| 22 | 6 | 6 | 6 | 8 | 13 | 35 | 29 | 7 | 10 |
| 23 | 5 | 6 | 6 | 8 | 13 | 35 | 27 | 10 | 10 |
| 24 | 5 | 6 | 6 | 8 | 13 | 34 | 27 | 10 | 10 |
| 25 | 5 | 7 | 6 | 8 | 11 | 34 | 27 | 14 | 10 |
| 26 | 4 | 7 | 6 | 8 | 13 | 33 | 27 | 14 | 10 |
| 27 | 4 | 7 | 6 | 8 | 13 | 33 | 25 | 10 | 10 |
| 28 | 4 | 6 | 6 | 8 | 13 | 32 | 25 | 10 | 10 |
| 29 | 4 | ....... | 6 | 8 | 13 | 34 | 25 | 10 | 10 |
| 30 | 4 | ....... | 6 | 8 | 15 | 36 | 25 | 10 | 10 |
| 31 | 4 | ....... | 6 | ....... | 15 | ....... | 16 | 10 | ....... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 9 | 6 | 14 | 6 | 13 | 6 | 8 | 8 | 13 | 10 | 12 | 9 |
| 2 | 9 | 6 | 14 | 7 | 14 | 6 | 9 | 7 | 13 | 10 | 12 | 8 |
| 3 | 9 | 6 | 14 | 7 | 16 | 6 | 10 | 6 | 13 | 10 | 12 | 8 |
| 4 | 9 | 7 | 16 | 8 | 16 | 6 | 12 | 6 | 13 | 10 | 12 | 8 |
| 5 | 6 | 7 | 16 | 9 | 16 | 6 | 12 | 6 | 13 | 10 | 12 | 8 |
| 6 | 6 | 7 | 16 | 10 | 16 | 5 | 12 | 6 | 13 | 10 | 11 | 8 |
| 7 | 6 | 7 | 22 | 12 | 16 | 5 | 12 | 6 | 13 | 10 | 11 | 8 |
| 8 | 5 | 7 | 22 | 11 | 16 | 4 | 12 | 6 | 13 | 10 | 10 | 8 |
| 9 | 5 | 7 | 22 | 9 | 16 | 4 | 12 | 6 | 13 | 10 | 10 | 8 |
| 10 | 5 | 7 | 22 | 8 | 18 | 4 | 12 | 6 | 13 | 9 | 10 | 8 |
| 11 | 5 | 7 | 22 | 8 | 19 | 4 | 10 | 6 | 13 | 9 | 10 | 8 |
| 12 | 5 | 7 | 16 | 8 | 20 | 5 | 8 | 6 | 13 | 10 | 10 | 8 |
| 13 | 5 | 7 | 16 | 8 | 19 | 5 | 6 | 6 | 13 | 10 | 10 | 8 |
| 14 | 6 | 7 | 14 | 8 | 17 | 6 | 5 | 6 | 13 | 11 | 10 | 9 |
| 15 | 6 | 7 | 14 | 8 | 16 | 6 | 5 | 6 | 13 | 11 | 10 | 10 |
| 16 | 6 | 7 | 9 | 8 | 15 | 6 | 4 | 7 | 12 | 11 | 9 | 12 |
| 17 | 9 | 7 | 9 | 9 | 14 | 6 | 4 | 8 | 12 | 11 | 8 | 11 |
| 18 | 9 | 7 | 12 | 10 | 12 | 7 | 4 | 9 | 12 | 11 | 8 | 11 |
| 19 | 9 | 7 | 12 | 12 | 10 | 7 | 8 | 9 | 12 | 12 | 8 | 10 |
| 20 | 9 | 7 | 12 | 13 | 8 | 8 | 12 | 9 | 12 | 13 | 8 | 10 |
| 21 | 9 | 7 | 14 | 15 | 6 | 7 | 16 | 9 | 11 | 13 | 8 | 10 |
| 22 | 9 | 7 | 12 | 16 | 6 | 5 | 6 | 9 | 11 | 13 | 8 | 10 |
| 23 | 9 | 7 | 16 | 16 | 6 | 8 | 11 | 9 | 10 | 12 | 8 | 10 |
| 24 | 9 | 7 | 16 | 16 | 6 | 7 | 16 | 9 | 10 | 12 | 8 | 9 |
| 25 | 9 | 9 | 16 | 16 | 6 | 7 | 13 | 9 | 10 | 15 | 8 | 9 |
| 26 | 9 | 9 | 16 | 14 | 6 | 6 | 10 | 9 | 10 | 18 | 8 | 9 |
| 27 | 9 | 9 | 16 | 13 | 6 | 7 | 7 | 9 | 10 | 21 | 8 | 8 |
| 28 | 9 | 9 | 14 | 12 | 6 | 7 | 8 | 10 | 11 | 18 | 8 | 8 |
| 29 | 6 | 9 | 9 | 12 | ...... | 8 | 8 | 12 | 10 | 15 | 8 | 8 |
| 30 | 6 | 9 | 9 | 12 | ...... | 8 | 9 | 13 | 10 | 12 | 8 | 8 |
| 31 | 6 | ...... | 9 | 12 | ...... | 8 | ...... | 13 | ...... | 12 | 8 | ...... |

[illegible]—Contd

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | 1.3 | | | | 1.3 | 16 | 1.3 | | | | 1.4 |
| 2 | | | | 1.3 | | 17 | | | | 1.3 | |
| 3 | | 1.3 | 1.3 | | | 18 | | 1.3 | 1.3 | | 1.3 |
| 4 | 1.3 | | | | 1.4 | 19 | 1.3 | | | | |
| 5 | | | | 1.3 | | 20 | | | | 1.3 | |
| 6 | | 1.3 | 1.3 | | 1.3 | 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | 1.3 | | | | 1.35 | 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | | | | 1.3 | | 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | | 1.3 | 1.3 | | | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | | | | 1.3 | 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | | | | 1.3 | | | | | | | |
| 12 | | 1.3 | 1.3 | | | | | | | | |
| 13 | [illegible] | | | | 1.3 | | | | | | |
| 14 | | | | 1.3 | | | | | | | |
| 15 | | [illegible] | 1.3 | | | | | | | | |

*Daily discharge, in second-feet, of Tuttle Creek near Lone Pine, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1909.** | | | | | | | | | |
| 1 | 5 | 4 | 6 | 7 | 7 | 15 | 36 | 16 | 10 |
| 2 | 5 | 4 | 6 | 7 | 8 | 15 | 36 | 16 | 14 |
| 3 | 5 | 4 | 6 | 7 | 10 | 17 | 35 | 12 | 14 |
| 4 | 5 | 4 | 6 | 7 | 12 | 17 | 35 | 12 | 14 |
| 5 | 5 | 5 | 6 | 7 | 12 | 17 | 32 | 12 | 14 |
| 6 | 5 | 5 | 6 | 7 | 12 | 17 | 31 | 12 | 14 |
| 7 | 5 | 4 | 6 | 7 | 12 | 17 | 31 | 13 | 14 |
| 8 | 5 | 4 | 6 | 7 | 12 | 20 | 30 | 13 | 10 |
| 9 | 5 | 5 | 6 | 7 | 10 | 22 | 28 | 13 | 10 |
| 10 | 5 | 7 | 6 | 7 | 9 | 22 | 28 | 13 | 10 |
| 11 | 5 | 8 | 6 | 7 | 9 | 22 | 28 | 13 | 7 |
| 12 | 5 | 7 | 6 | 7 | 9 | 22 | 31 | 13 | 7 |
| 13 | 5 | 7 | 6 | 7 | 9 | 27 | 34 | 14 | 10 |
| 14 | 6 | 7 | 6 | 7 | 12 | 27 | 36 | 14 | 12 |
| 15 | 6 | 7 | 6 | 7 | 12 | 27 | 34 | 14 | 7 |
| 16 | 6 | 7 | 6 | 7 | 13 | 32 | 34 | 14 | 7 |
| 17 | 6 | 8 | 6 | 7 | 13 | 32 | 34 | 16 | 7 |
| 18 | 6 | 8 | 6 | 8 | 13 | 32 | 34 | 19 | 7 |
| 19 | 6 | 7 | 6 | 8 | 13 | 32 | 29 | 19 | 7 |
| 20 | 6 | 7 | 6 | 8 | 13 | 31 | 29 | 14 | 10 |
| 21 | 6 | 7 | 6 | 8 | 15 | 30 | 29 | 10 | 10 |
| 22 | 6 | 6 | 6 | 8 | 13 | 35 | 29 | 7 | 10 |
| 23 | 5 | 6 | 6 | 8 | 13 | 35 | 27 | 10 | 10 |
| 24 | 5 | 6 | 6 | 8 | 13 | 34 | 27 | 10 | 10 |
| 25 | 5 | 7 | 6 | 8 | 11 | 34 | 27 | 14 | 10 |
| 26 | 4 | 7 | 6 | 8 | 13 | 33 | 27 | 14 | 10 |
| 27 | 4 | 7 | 6 | 8 | 13 | 33 | 25 | 10 | 10 |
| 28 | 4 | 6 | 6 | 8 | 13 | 32 | 25 | 10 | 10 |
| 29 | 4 | ........ | 6 | 8 | 13 | 34 | 25 | 10 | 10 |
| 30 | 4 | ........ | 6 | 8 | 15 | 36 | 25 | 10 | 10 |
| 31 | 4 | ........ | 6 | ........ | 15 | ........ | 16 | 10 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 1 | 9 | 6 | 14 | 6 | 13 | 6 | 8 | 8 | 13 | 10 | 12 | 9 |
| 2 | 9 | 6 | 14 | 7 | 14 | 6 | 9 | 7 | 13 | 10 | 12 | 8 |
| 3 | 9 | 6 | 14 | 7 | 16 | 6 | 10 | 6 | 13 | 10 | 12 | 8 |
| 4 | 9 | 7 | 16 | 8 | 16 | 6 | 12 | 6 | 13 | 10 | 12 | 8 |
| 5 | 6 | 7 | 16 | 9 | 16 | 6 | 12 | 6 | 13 | 10 | 12 | 8 |
| 6 | 6 | 7 | 16 | 10 | 16 | 5 | 12 | 6 | 13 | 10 | 11 | 8 |
| 7 | 6 | 7 | 22 | 12 | 16 | 5 | 12 | 6 | 13 | 10 | 11 | 8 |
| 8 | 5 | 7 | 22 | 11 | 16 | 4 | 12 | 6 | 13 | 10 | 10 | 8 |
| 9 | 5 | 7 | 22 | 9 | 16 | 4 | 12 | 6 | 13 | 10 | 10 | 8 |
| 10 | 5 | 7 | 22 | 8 | 18 | 4 | 12 | 6 | 13 | 9 | 10 | 8 |
| 11 | 5 | 7 | 22 | 8 | 19 | 4 | 10 | 6 | 13 | 9 | 10 | 8 |
| 12 | 5 | 7 | 16 | 8 | 20 | 5 | 8 | 6 | 13 | 10 | 10 | 8 |
| 13 | 5 | 7 | 16 | 8 | 19 | 5 | 6 | 6 | 13 | 10 | 10 | 8 |
| 14 | 6 | 7 | 14 | 8 | 17 | 6 | 5 | 6 | 13 | 11 | 10 | 9 |
| 15 | 6 | 7 | 14 | 8 | 16 | 6 | 5 | 6 | 13 | 11 | 10 | 10 |
| 16 | 6 | 7 | 9 | 8 | 15 | 6 | 4 | 7 | 12 | 11 | 9 | 12 |
| 17 | [illegible] | [illegible] | [illegible] | 9 | 14 | 6 | 4 | 8 | 12 | 11 | 8 | 11 |
| 18 | [illegible] | [illegible] | [illegible] | 10 | [illegible] | 7 | 4 | 9 | 12 | 11 | 8 | 11 |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 8 | 9 | 12 | 12 | 8 | 10 |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 12 | 9 | 12 | 13 | 8 | 10 |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16 | [illegible] | 11 | 13 | 8 | 10 |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 6 | [illegible] | [illegible] | 13 | 8 | 10 |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 11 | [illegible] | [illegible] | 12 | 8 | 10 |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 12 | 8 | 9 |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 15 | 8 | 9 |
| 26 | 9 | [illegible] | [illegible] | [illegible] | 6 | [illegible] | [illegible] | [illegible] | 10 | 18 | 8 | 9 |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | 6 | [illegible] | [illegible] | [illegible] | 10 | 21 | 8 | 8 |
| 28 | [illegible] | [illegible] | [illegible] | 12 | 6 | [illegible] | [illegible] | 10 | 11 | 18 | 8 | 8 |
| 29 | [illegible] | [illegible] | [illegible] | 12 | ........ | [illegible] | [illegible] | 12 | 10 | 15 | 8 | 8 |
| 30 | [illegible] | [illegible] | [illegible] | 12 | [illegible] | [illegible] | [illegible] | 13 | 10 | 12 | 8 | 8 |
| 31 | [illegible] | [illegible] | 9 | 12 | [illegible] | [illegible] | [illegible] | 13 | ........ | 12 | 8 | ........ |

*Daily gage heights, in feet, of Tuttle Creek near Lone Pine, Cal., for 1908–1911*—Cont'd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908-9. | | | | | | | | | | | | |
| 21 | | | | [illegible] | | | [illegible] | [illegible] | | | | 1.2 |
| 22 | | [illegible] | [illegible] | | | [illegible] | | | | | 1.1 | |
| 23 | [illegible] | | | | [illegible] | | | | [illegible] | [illegible] | | |
| 24 | | | | [illegible] | | | [illegible] | [illegible] | | | | 1.2 |
| 25 | | [illegible] | [illegible] | | | [illegible] | | [illegible] | | | [illegible] | |
| 26 | [illegible] | | | | [illegible] | | | | [illegible] | [illegible] | | |
| 27 | | | | [illegible] | | | [illegible] | [illegible] | | | | 1.2 |
| 28 | | [illegible] | [illegible] | | | [illegible] | | | | | [illegible] | |
| 29 | [illegible] | | | | | | | | [illegible] | [illegible] | | |
| 30 | | | | [illegible] | | | [illegible] | [illegible] | | | | 1.2 |
| 31 | | | [illegible] | [illegible] | | [illegible] | | | | | [illegible] | |
| 1909-10. | | | | | | | | | | | | |
| 1 | | | | [illegible] | | | [illegible] | | | | | 1.35 |
| 2 | | [illegible] | [illegible] | | | [illegible] | | | 1.4 | 1.3 | 1.4 | |
| 3 | 1.2 | | | | 1.4 | | | 1.2 | | | | |
| 4 | | | | [illegible] | | | [illegible] | | | | | 1.3 |
| 5 | | [illegible] | [illegible] | | | [illegible] | | | 1.4 | 1.3 | 1.4 | |
| 6 | [illegible] | | | | 1.4 | | | 1.2 | | | | |
| 7 | | | | [illegible] | | | [illegible] | | | | | 1.3 |
| 8 | | [illegible] | [illegible] | | | [illegible] | | | 1.4 | [illegible] | 1.35 | |
| 9 | [illegible] | | | | 1.4 | | | 1.2 | | | | |
| 10 | | | | [illegible] | | | [illegible] | | | | | 1.3 |
| 11 | | [illegible] | [illegible] | | | [illegible] | | | 1.4 | 1.3 | 1.35 | |
| 12 | [illegible] | | | | [illegible] | | | 1.2 | | | | |
| 13 | | | | [illegible] | | | [illegible] | | | | | 1.3 |
| 14 | | [illegible] | [illegible] | | | 1.1 | | | [illegible] | 1.35 | 1.35 | |
| 15 | 1.1 | | | | 1.4 | | | 1.2 | | | | |
| 16 | | | | 1.2 | | | [illegible] | | | | | 1.4 |
| 17 | | [illegible] | [illegible] | | | 1.1 | | | 1.35 | 1.35 | 1.3 | |
| 18 | 1.2 | | | | [illegible] | | [illegible] | 1.3 | | | | |
| 19 | | | | [illegible] | | | | | | | | 1.35 |
| 20 | | [illegible] | [illegible] | | | [illegible] | | | 1.35 | | 1.3 | |
| 21 | 1.2 | | | | [illegible] | | 1.4 | 1.3 | | 1.4 | | |
| 22 | | | | 1.4 | | | | | | | | 1.35 |
| 23 | | [illegible] | 1.4 | | | 1.2 | | | 1.3 | | 1.3 | |
| 24 | 1.2 | | | | 1.1 | | 1.4 | 1.3 | | 1.4 | | |
| 25 | | | | 1.4 | | | | | | | | 1.3 |
| 26 | | 1.2 | 1.4 | | | 1.1 | | | 1.3 | | 1.3 | |
| 27 | 1.2 | | | | 1.1 | | 1.2 | 1.3 | | 1.6 | | |
| 28 | | | | 1.3 | | | | | | | | 1.3 |
| 29 | | 1.2 | 1.2 | | | [illegible] | | | 1.3 | | 1.3 | |
| 30 | 1.1 | | | | | | 1.3 | 1.4 | | 1.4 | | |
| 31 | | | | 1.3 | | | | | | | | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | 1910-11. | | | | | |
| 1 | 1.3 | | | | 1.3 | 16 | 1.3 | | | | 1.4 |
| 2 | | | | 1.3 | | 17 | | | | 1.3 | |
| 3 | | 1.3 | 1.3 | | | 18 | | 1.3 | 1.3 | | |
| 4 | 1.3 | | | | 1.4 | 19 | 1.3 | | | | 1.35 |
| 5 | | | | 1.3 | | 20 | | | | 1.3 | |
| 6 | | 1.3 | 1.3 | | 1.3 | 21 | | 1.3 | 1.3 | | |
| 7 | 1.2 | | | | 1.35 | 22 | 1.3 | | | | 1.35 |
| 8 | | | | 1.3 | | 23 | | | | 1.3 | |
| 9 | | 1.3 | 1.3 | | | 24 | | 1.3 | 1.3 | | |
| 10 | 1.2 | | | | 1.3 | 25 | 1.3 | | | | 1.3 |
| 11 | | | | 1.3 | | 26 | | | | 1.3 | |
| 12 | | 1.3 | 1.3 | | | 27 | | 1.3 | 1.3 | | |
| 13 | 1.3 | | | | 1.3 | 28 | 1.3 | | | | 1.3 |
| 14 | | | | 1.3 | | 29 | | | | 1.4 | |
| 15 | | 1.3 | 1.3 | | | 30 | | 1.3 | 1.3 | | |
| | | | | | | 31 | 1.3 | | | | |

*Daily discharge, in second-feet, of Tuttle Creek near Lone Pine, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 5 | 4 | 6 | 7 | 7 | 15 | 36 | 16 | 10 |
| 2 | 5 | 4 | 6 | 7 | 8 | 15 | 36 | 16 | 14 |
| 3 | 5 | 4 | 6 | 7 | 10 | 17 | 35 | 12 | 14 |
| 4 | 5 | 4 | 6 | 7 | 12 | 17 | 35 | 12 | 14 |
| 5 | 5 | 5 | 6 | 7 | 12 | 17 | 32 | 12 | 14 |
| 6 | 5 | 5 | 6 | 7 | 12 | 17 | 31 | 12 | 14 |
| 7 | 5 | 4 | 6 | 7 | 12 | 17 | 31 | 13 | 14 |
| 8 | 5 | 4 | 6 | 7 | 12 | 20 | 30 | 13 | 10 |
| 9 | 5 | 5 | 6 | 7 | 10 | 22 | 28 | 13 | 10 |
| 10 | 5 | 7 | 6 | 7 | 9 | 22 | 28 | 13 | 10 |
| 11 | 5 | 8 | 6 | 7 | 9 | 22 | 28 | 13 | 7 |
| 12 | 5 | 7 | 6 | 7 | 9 | 22 | 31 | 13 | 7 |
| 13 | 5 | 7 | 6 | 7 | 9 | 27 | 34 | 14 | 10 |
| 14 | 6 | 7 | 6 | 7 | 12 | 27 | 36 | 14 | 12 |
| 15 | 6 | 7 | 6 | 7 | 12 | 27 | 34 | 14 | 7 |
| 16 | 6 | 7 | 6 | 7 | 13 | 32 | 34 | 14 | 7 |
| 17 | 6 | 8 | 6 | 7 | 13 | 32 | 34 | 16 | 7 |
| 18 | 6 | 8 | 6 | 8 | 13 | 32 | 34 | 19 | 7 |
| 19 | 6 | 7 | 6 | 8 | 13 | 32 | 29 | 19 | 7 |
| 20 | 6 | 7 | 6 | 8 | 13 | 31 | 29 | 14 | 10 |
| 21 | 6 | 7 | 6 | 8 | 15 | 30 | 29 | 10 | 10 |
| 22 | 6 | 6 | 6 | 8 | 13 | 35 | 29 | 7 | 10 |
| 23 | 5 | 6 | 6 | 8 | 13 | 35 | 27 | 10 | 10 |
| 24 | 5 | 6 | 6 | 8 | 13 | 34 | 27 | 10 | 10 |
| 25 | 5 | 7 | 6 | 8 | 11 | 34 | 27 | 14 | 10 |
| 26 | 4 | 7 | 6 | 8 | 13 | 33 | 27 | 14 | 10 |
| 27 | 4 | 7 | 6 | 8 | 13 | 33 | 25 | 10 | 10 |
| 28 | 4 | 6 | 6 | 8 | 13 | 32 | 25 | 10 | 10 |
| 29 | 4 | ........ | 6 | 8 | 13 | 34 | 25 | 10 | 10 |
| 30 | 4 | ........ | 6 | 8 | 15 | 36 | 25 | 10 | 10 |
| 31 | 4 | ........ | 6 | ........ | 15 | ........ | 16 | 10 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 9 | 6 | 14 | 6 | 13 | 6 | 8 | 8 | 13 | 10 | 12 | 9 |
| 2 | 9 | 6 | 14 | 7 | 14 | 6 | 9 | 7 | 13 | 10 | 12 | 8 |
| 3 | 9 | 6 | 14 | 7 | 16 | 6 | 10 | 6 | 13 | 10 | 12 | 8 |
| 4 | 9 | 7 | 16 | 8 | 16 | 6 | 12 | 6 | 13 | 10 | 12 | 8 |
| 5 | 6 | 7 | 16 | 9 | 16 | 6 | 12 | 6 | 13 | 10 | 12 | 8 |
| 6 | 6 | 7 | 16 | 10 | 16 | 5 | 12 | 6 | 13 | 10 | 11 | 8 |
| 7 | 6 | 7 | 22 | 12 | 16 | 5 | 12 | 6 | 13 | 10 | 11 | 8 |
| 8 | 5 | 7 | 22 | 11 | 16 | 4 | 12 | 6 | 13 | 10 | 10 | 8 |
| 9 | 5 | 7 | 22 | 9 | 16 | 4 | 12 | 6 | 13 | 10 | 10 | 8 |
| 10 | 5 | 7 | 22 | 8 | 18 | 4 | 12 | 6 | 13 | 9 | 10 | 8 |
| 11 | 5 | 7 | 22 | 8 | 19 | 4 | 10 | 6 | 13 | 9 | 10 | 8 |
| 12 | 5 | 7 | 16 | 8 | 20 | 5 | 8 | 6 | 13 | 10 | 10 | 8 |
| 13 | 5 | 7 | 16 | 8 | 19 | 5 | 6 | 6 | 13 | 10 | 10 | 8 |
| 14 | 6 | 7 | 14 | 8 | 17 | 6 | 5 | 6 | 13 | 11 | 10 | 9 |
| 15 | 6 | 7 | 14 | 8 | 16 | 6 | 5 | 6 | 13 | 11 | 10 | 10 |
| 16 | 6 | 7 | 9 | 8 | 15 | 6 | 4 | 7 | 12 | 11 | 9 | 12 |
| 17 | 9 | 7 | 9 | 9 | 14 | 6 | 4 | 8 | 12 | 11 | 8 | 11 |
| 18 | 9 | 7 | 12 | 10 | 12 | 7 | 4 | 9 | 12 | 11 | 8 | 11 |
| 19 | 9 | 7 | 12 | 12 | 10 | 7 | 8 | 9 | 12 | 12 | 8 | 10 |
| 20 | 9 | 7 | 12 | 13 | 8 | 8 | 12 | 9 | 12 | 13 | 8 | 10 |
| 21 | 9 | 7 | 14 | 15 | 6 | 7 | 16 | 9 | 11 | 13 | 8 | 10 |
| 22 | 9 | 7 | 12 | 16 | 6 | 5 | 6 | 9 | 11 | 13 | 8 | 10 |
| 23 | 9 | 7 | 16 | 16 | 6 | 8 | 11 | 9 | 10 | 12 | 8 | 10 |
| 24 | 9 | 7 | 16 | 16 | 6 | 7 | 16 | 9 | 10 | 12 | 8 | 9 |
| 25 | 9 | 9 | 16 | 16 | 6 | 7 | 13 | 9 | 10 | 15 | 8 | 9 |
| 26 | 9 | 9 | 16 | 14 | 6 | 6 | 10 | 9 | 10 | 18 | 8 | 9 |
| 27 | 9 | 9 | 16 | 13 | 6 | 7 | 7 | 9 | 10 | 21 | 8 | 8 |
| 28 | 9 | 9 | 14 | 12 | 6 | 7 | 8 | 10 | 11 | 18 | 8 | 8 |
| 29 | 6 | 9 | 9 | 12 | ........ | 8 | 8 | 12 | 10 | 15 | 8 | 8 |
| 30 | 6 | 9 | 9 | 12 | ........ | 8 | 9 | 13 | 10 | 12 | 8 | 8 |
| 31 | 6 | ........ | 9 | 12 | ........ | 8 | ........ | 13 | ........ | 12 | 8 | ........ |

*Daily discharge, in second-feet, of [illegible] Creek near [illegible], Cal., for 1906–1911*—Con.

| Day. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Day. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

NOTE.—Daily discharge [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

*Monthly discharge of [illegible] Creek near [illegible], Cal., for 1906–[illegible].*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1906.** | | | | | |
| January | | | [illegible] | [illegible] | |
| February | | | [illegible] | [illegible] | |
| March | | | [illegible] | [illegible] | |
| April | | | [illegible] | [illegible] | |
| May | | | [illegible] | [illegible] | |
| June | | | [illegible] | 1,[illegible] | |
| July | | | [illegible] | 1,[illegible] | |
| August | | | [illegible] | 1,[illegible] | |
| September | | | [illegible] | [illegible] | |
| The period | | | | [illegible] | |
| **1906–7.** | | | | | |
| October | | | [illegible] | [illegible] | |
| November | | | [illegible] | [illegible] | |
| December | | | [illegible] | [illegible] | |
| January | | | [illegible] | [illegible] | |
| February | | | [illegible] | [illegible] | |
| March | | | [illegible] | [illegible] | |
| April | | | [illegible] | [illegible] | |
| May | | | [illegible] | [illegible] | |
| June | | | [illegible] | 1,[illegible] | |
| July | | | [illegible] | 1,[illegible] | |
| August | | | [illegible] | [illegible] | |
| September | | | 7.1 | [illegible] | |
| The year | | | [illegible] | 7,[illegible] | |
| **1907–8.** | | | | | |
| October | | | 7.5 | 460 | |
| November | | | 7.6 | 452 | |
| December | | | 5.9 | 363 | |
| January | | | 5.8 | [illegible] | |
| February | | | 4.5 | 259 | |
| March | | | 5.0 | [illegible] | |
| April | | | 5.3 | [illegible] | |
| May | | | 6.0 | 369 | |
| June | | | 10 | 595 | |
| July | | | 14 | 861 | |
| August | | | 15 | 922 | |
| September | | | 12 | 714 | |
| The year | | | 8.20 | 5,960 | |

*a* Estimated.

*Monthly discharge of Tuttle Creek near Lone Pine, Cal., for 1906–1911*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1908–9.** | | | | | |
| October | ........... | ........... | 8 | 492 | |
| November | ........... | ........... | 7 | 417 | |
| December | ........... | ........... | 7 | 430 | |
| January | 6 | 4 | 5.10 | 314 | C. |
| February | 8 | 4 | 6.10 | 339 | C. |
| March | 6 | 6 | 6.0 | 369 | C. |
| April | 8 | 7 | 7.43 | 442 | C. |
| May | 15 | 7 | 11.8 | 726 | C. |
| June | 36 | 15 | 26.6 | 1,580 | C. |
| July | 36 | 16 | 29.9 | 1,840 | C. |
| August | 16 | 10 | 12.8 | 787 | C. |
| September | 14 | 7 | 10.2 | 607 | C. |
| The year | ........... | ........... | 11.5 | 8,340 | |
| **1909–10.** | | | | | |
| October | 9 | 5 | 7.36 | 453 | C. |
| November | 9 | 6 | 7.3 | 434 | C. |
| December | 22 | 9 | 14.9 | 916 | C. |
| January | 16 | 6 | 10.7 | 658 | C. |
| February | 20 | 6 | 12.7 | 705 | C. |
| March | 8 | 4 | 6.13 | 377 | C. |
| April | 16 | 4 | 8.97 | 534 | C. |
| May | 13 | 6 | 7.94 | 488 | C. |
| June | 13 | 10 | 11.9 | 708 | C. |
| July | 21 | 9 | 11.9 | 732 | C. |
| August | 12 | 8 | 9.39 | 577 | C. |
| September | 12 | 8 | 8.90 | 530 | C. |
| The year | 22 | 4 | 9.84 | 7,110 | |
| **1910–11.** | | | | | |
| October | 8 | 6 | 7.29 | 448 | C. |
| November | 7 | 6 | 6.87 | 409 | C. |
| December | 7 | 6 | 6.61 | 406 | C. |
| January | 9 | 6 | 6.4 | 394 | C. |
| February | 9 | 6 | 7.5 | 417 | C. |

NOTE.—Discharge for 1906 determined by interpolating between discharge measurements; 1907 and 1908 by the indirect method for shifting channels.

## COTTONWOOD CREEK NEAR OLANCHA, CAL.

The gaging station, which was located at a point 100 feet above the head of the diversion pipe of the Los Angeles Aqueduct, in sec. 21, T. 17 S., R. 36 E., was established September 9, 1908, replacing the station established September 26, 1906, at a point about one-fourth mile above the crossing of the Los Angeles Aqueduct and about 15 miles south of Lone Pine.

No water is diverted above the station. Just below the station the Los Angeles Aqueduct diverts water for the development of power. The drainage area above the mouth of the canyon is about 42 square miles.

The gage is a vertical staff on the right bank 500 feet below the footbridge from which discharge measurements were made.

The channel is composed of sand and gravel and is somewhat shifting. Both banks are high and rocky, and the current is swift at all stages.

The record may be considered good.

The station was discontinued March 31, 1911.

[illegible] near Olancha [illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Hydrographer. | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | W. A. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] Barrows. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | R. [illegible] Haines. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |

*ily gage height, in feet, of Cottonwood Creek near Olancha, Cal., for 1906–1911*—Con.

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | | |
| | ...... | 0.5 | 0.5 | ...... | ...... | 0.6 | 0.75 | ...... | ...... | ...... | ...... | ...... | ...... |
| | ...... | .65 | ...... | 0.6 | 0.6 | ...... | ...... | ...... | ...... | 1.8 | ...... | 0.9 | ...... |
| | ...... | .5 | .6 | ...... | ...... | .6 | .7 | 1.65 | ...... | ...... | 1.3 | ...... | ...... |
| | ...... | .7 | ...... | ...... | .6 | .6 | ...... | ...... | ...... | ...... | ...... | .9 | 0.6 |
| | ...... | .75 | .5 | .6 | ...... | ...... | ...... | 1.85 | ...... | 1.7 | 1.3 | ...... | ...... |
| | 0.8 | .74 | ...... | ...... | .6 | .6 | .65 | ...... | ...... | ...... | ...... | .9 | .55 |
| | .8 | .7 | .5 | .6 | ...... | ...... | ...... | 1.9 | ...... | 1.8 | 1.3 | ...... | ...... |
| | .8 | .7 | ...... | ...... | ...... | .6 | .65 | ...... | ...... | ...... | ...... | .85 | .55 |
| | .8 | .65 | .5 | .6 | .6 | ...... | ...... | ...... | ...... | 1.8 | ...... | ...... | ...... |
| | .8 | .70 | ...... | ...... | ...... | ...... | .65 | 1.8 | ...... | ...... | 1.2 | .85 | ...... |
| | ...... | .65 | ...... | ...... | .55 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907-8. | | | | | | | | | | | | |
| 1 | 0.55 | ...... | 0.8 | ...... | 0.65 | ...... | ...... | ...... | ...... | 1.15 | ...... | ...... |
| 2 | ...... | ...... | ...... | ...... | ...... | 0.6 | ...... | ...... | 1.9 | 1.15 | ...... | ...... |
| 3 | .5 | ...... | .7 | ...... | ...... | ...... | ...... | ...... | ...... | 1.15 | ...... | ...... |
| 4 | ...... | 1.2 | ...... | ...... | .65 | .7 | ...... | ...... | ...... | ...... | 0.9 | ...... |
| 5 | .8 | ...... | .6 | ...... | ...... | .75 | ...... | ...... | ...... | 1.1 | 1.05 | ...... |
| 6 | ...... | .8 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 1.1 | .95 | ...... |
| 7 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 1.1 | .9 | ...... |
| 8 | 1.0 | ...... | .9 | ...... | .65 | .7 | ...... | ...... | ...... | 1.1 | .9 | ...... |
| 9 | ...... | .8 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 1.1 | .9 | ...... |
| 10 | .9 | ...... | .8 | ...... | .65 | ...... | ...... | 1.55 | ...... | 1.05 | 1.0 | ...... |
| 11 | ...... | .9 | ...... | ...... | ...... | ...... | ...... | 1.55 | ...... | 1.05 | .9 | ...... |
| 12 | .8 | ...... | .8 | ...... | ...... | .7 | ...... | ...... | 1.25 | 1.0 | .9 | ...... |
| 13 | ...... | .8 | ...... | ...... | ...... | ...... | ...... | ...... | 1.2 | 1.0 | .8 | ...... |
| 14 | ...... | ...... | ...... | ...... | .65 | ...... | ...... | ...... | 1.2 | 1.0 | .8 | ...... |
| 15 | .7 | .7 | .8 | ...... | ...... | .7 | ...... | ...... | 1.2 | 1.0 | .8 | ...... |
| 16 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 1.2 | 1.0 | .8 | ...... |
| 17 | 1.4 | .5 | .7 | ...... | .60 | ...... | ...... | ...... | 1.2 | 1.0 | .75 | ...... |
| 18 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 1.2 | 1.0 | .75 | ...... |
| 19 | 1.1 | .5 | .8 | ...... | ...... | .95 | ...... | ...... | 1.2 | 1.05 | .75 | ...... |
| 20 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 1.2 | 1.C5 | .75 | ...... |
| 21 | ...... | .5 | ...... | ...... | .6 | ...... | ...... | ...... | 1.2 | 1.05 | .7 | ...... |
| 22 | 1.0 | ...... | .8 | ...... | ...... | 1.1 | ...... | ...... | 1.1 | 1.0 | .7 | ...... |
| 23 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 1.2 | 1.0 | .7 | ...... |
| 24 | 1.25 | .75 | .75 | ...... | .7 | ...... | ...... | ...... | 1.2 | 1.0 | .65 | ...... |
| 25 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 1.1 | 1.0 | .65 | ...... |
| 26 | 1.2 | .8 | .75 | ...... | ...... | 1.0 | ...... | ...... | 1.2 | 1.0 | .6 | ...... |
| 27 | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 1.0 | .6 | ...... |
| 28 | 1.2 | .8 | ...... | ...... | .6 | ...... | ...... | ...... | 1.09 | 1.05 | .6 | ...... |
| 29 | ...... | ...... | .75 | ...... | ...... | 1.0 | ...... | ...... | 1.2 | 1.05 | .6 | ...... |
| 30 | ...... | .8 | ...... | ...... | ...... | ...... | ...... | ...... | 1.2 | ...... | .5 | ...... |
| 31 | ...... | ...... | .75 | ...... | ...... | ...... | ...... | 1.7 | ...... | ...... | .6 | ...... |
| 1908-9. | | | | | | | | | | | | |
| 1 | ...... | 2.0 | 1.7 | 1.5 | 1.9 | 1.75 | 1.8 | 3.0 | 4.2 | 3.3 | 2.2 | 2.0 |
| 2 | ...... | 1.9 | 1.7 | 1.5 | 1.8 | 1.75 | 1.8 | 3.1 | 4.35 | 3.3 | 2.2 | 1.9 |
| 3 | ...... | 1.9 | 1.7 | 1.5 | 1.75 | 1.75 | 1.85 | 3.2 | 4.6 | 3.3 | 2.2 | 1.9 |
| 4 | ...... | 1.9 | 1.7 | 1.5 | 1.7 | 1.75 | 1.9 | 3.3 | 4.55 | 3.3 | 2.2 | 1.9 |
| 5 | ...... | 1.85 | 1.7 | 1.5 | 1.7 | 1.8 | 1.9 | 3.4 | 4.4 | 3.25 | 2.15 | 1.9 |
| 6 | ...... | 1.85 | 1.7 | 1.5 | 1.7 | 1.8 | 1.9 | 3.4 | 4.15 | 3.2 | 2.1 | 1.9 |
| 7 | ...... | 1.9 | 1.7 | 1.5 | 1.7 | 1.8 | 1.9 | 3.45 | 3.95 | 3.15 | 2.1 | 1.9 |
| 8 | ...... | 2.0 | 1.7 | 1.55 | 1.7 | 1.8 | 1.9 | 3.3 | 3.8 | 3.0 | 2.1 | 1.9 |
| 9 | ...... | 2.0 | 1.7 | 1.55 | 1.7 | 1.8 | 1.9 | 3.3 | 3.65 | 3.0 | 2.1 | 1.9 |
| 10 | ...... | 2.0 | 1.65 | 1.5 | 1.8 | 1.75 | 1.9 | 3.3 | 3.65 | 2.9 | 2.1 | 1.9 |
| 1 | 1.75 | 2.0 | 1.6 | 1.5 | 1.8 | 1.75 | 1.9 | 3.3 | 3.65 | 2.9 | 2.1 | 1.8 |
| 2 | 1.75 | 1.9 | 1.6 | 1.6 | 1.8 | 1.75 | 1.9 | 3.3 | 3.65 | 2.9 | 2.0 | 1.8 |
| 3 | 1.75 | 1.85 | 1.6 | 1.65 | 1.8 | 1.75 | 2.0 | 3.2 | 3.65 | 2.9 | 2.0 | 1.8 |
| 4 | 1.7 | 1.9 | 1.6 | 2.0 | 1.8 | 1.75 | 2.1 | 3.1 | 3.65 | 2.9 | 2.0 | 1.8 |
| | 1.75 | 1.5 | 1.6 | 1.7 | 1.8 | 1.75 | 2.2 | 3.2 | 3.6 | 2.9 | 2.0 | 1.75 |
| | 1.9 | 1.5 | 1.6 | 1.7 | 1.8 | 1.75 | 2.3 | 3.2 | 3.6 | 2.8 | 2.0 | 1.7 |
| | 1.9 | 1.4 | 1.6 | 1.7 | 1.75 | 1.75 | 2.4 | 3.2 | 3.6 | 2.8 | 1.9 | 1.7 |
| | 2.0 | 1.4 | 1.6 | 1.7 | 1.75 | 1.75 | 2.5 | 3.2 | 3.5 | 2.8 | 2.5 | 1.7 |
| | 2.25 | 1.4 | 1.5 | 1.7 | 1.75 | 1.75 | 2.55 | 3.2 | 3.45 | 2.7 | 2.2 | 1.7 |
| 30 | 2.2 | 1.5 | 1.5 | 2.0 | 1.75 | 1.75 | 2.4 | 3.2 | 3.4 | 2.7 | 2.0 | 1.7 |

*Daily gage height, in feet, of Cottonwood Creek near Olancha, Cal., for 1908–1911—Con.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3 | 4 | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3 | 4 | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1909–10. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | 1910–11. | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | | | | | | | 31 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Rating tables for Cottonwood Creek near Olancha, Cal.*

**For 1907.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.50 | 9.4 | 1.00 | 27 | 1.50 | 65 | 2.00 | 120 |
| .60 | 11 | 1.10 | 33 | 1.60 | 75 | 2.10 | 132 |
| .70 | 13 | 1.20 | 40 | 1.70 | 85 | 2.20 | 144 |
| .80 | 17 | 1.30 | 48 | 1.80 | 96 | 2.30 | 157 |
| .90 | 21 | 1.40 | 56 | 1.90 | 108 | | |

NOTE.—Table applicable only to open channel. It is based on 16 discharge measurements made during 1907, and is well defined between gage heights 0.5 foot and 2.3 feet.

**January 1 to September 8, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.60 | 11 | 1.10 | 35 | 1.60 | 76 | 2.10 | 132 |
| .70 | 15 | 1.20 | 42 | 1.70 | 86 | 2.20 | 145 |
| .80 | 19 | 1.30 | 49 | 1.80 | 97 | 2.30 | 158 |
| .90 | 24 | 1.40 | 57 | 1.90 | 108 | | |
| 1.00 | 29 | 1.50 | 66 | 2.00 | 120 | | |

NOTE.—Table applicable only to open channel. It is based on 14 discharge measurements made during 1908, and is well defined between gage heights 0.8 foot and 1.7 feet.

**September 9 to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.40 | 12.5 | 1.60 | 14.5 | 1.80 | 17.0 | 2.00 | 20.0 |
| 1.50 | 13.5 | 1.70 | 15.5 | 1.90 | 18.5 | | |

*Daily discharge, in second-feet, of Cottonwood Creek near Olancha, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 8.3 | 20 | 15 | 16 | 117 | 302 | 159 | 42 | 29 |
| 2 | 8.3 | 16 | 15 | 16 | 130 | 326 | 159 | 42 | 24 |
| 3 | 8.3 | 15 | 15 | 18 | 144 | 366 | 159 | 42 | 24 |
| 4 | 8.3 | 13 | 15 | 20 | 159 | 358 | 159 | 42 | 24 |
| 5 | 8.3 | 13 | 16 | 20 | 174 | 334 | 152 | 38 | 24 |
| 6 | 8.3 | 13 | 16 | 20 | 174 | 294 | 144 | 35 | 24 |
| 7 | 8.3 | 13 | 16 | 20 | 182 | 262 | 137 | 35 | 24 |
| 8 | 9.4 | 13 | 16 | 20 | 159 | 238 | 117 | 35 | 24 |
| 9 | 9.4 | 13 | 16 | 20 | 159 | 214 | 117 | 35 | 24 |
| 10 | 8.3 | 16 | 1[illegible] | 20 | 159 | 214 | 104 | 35 | 24 |
| 11 | 8.3 | 16 | 15 | 20 | 159 | 214 | 104 | 35 | 20 |
| 12 | 10 | 16 | 15 | 20 | 159 | 214 | 104 | 29 | 20 |
| 13 | 12 | 16 | 15 | 24 | 144 | 214 | 104 | 29 | 20 |
| 14 | 24 | 16 | 15 | 30 | 130 | 214 | 104 | 29 | 20 |
| 15 | 13 | 16 | 15 | 36 | 144 | 206 | 104 | 29 | 18 |
| 16 | 13 | 16 | 15 | 43 | 144 | 206 | 92 | 29 | 17 |
| 17 | 13 | 15 | 15 | 51 | 144 | 206 | 92 | 24 | 17 |
| 18 | 13 | 15 | 15 | 60 | 144 | 190 | 92 | 65 | 17 |
| 19 | 13 | 15 | 15 | 65 | 144 | 182 | 82 | 42 | 17 |
| 20 | 24 | 15 | 15 | 51 | 144 | 174 | 82 | 29 | 17 |
| 21 | 24 | 15 | 15 | 51 | 159 | 174 | 82 | 29 | 17 |
| 22 | 24 | 15 | 15 | 51 | 159 | 174 | 73 | 29 | 17 |
| 23 | 20 | 15 | 16 | 43 | 152 | 174 | 73 | 29 | 17 |
| 24 | 20 | 15 | 16 | 43 | 152 | 174 | 73 | 29 | 16 |
| 25 | 20 | 15 | 16 | 51 | 152 | 174 | 73 | 24 | 16 |
| 26 | 20 | 15 | 16 | 60 | 166 | 174 | 65 | 24 | 14 |
| 27 | 20 | 15 | 15 | 70 | 190 | 174 | 61 | 24 | 14 |
| 28 | 18 | 15 | 15 | 92 | 190 | 166 | 57 | 24 | 24 |
| 29 | 18 | ........ | 15 | 92 | 159 | 166 | 57 | 29 | 18 |
| 30 | 20 | ........ | 16 | 92 | 166 | 166 | 49 | 73 | 17 |
| 31 | 20 | ........ | 16 | ........ | 246 | ........ | 46 | 35 | ........ |

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## [illegible]

[illegible] station, which was located at a point just above the [illegible] near the mouth of the canyon, about [illegible] miles south of [illegible], [illegible] R. 36 E., was established [illegible].

No water is diverted above or near the station.

No gage-height record is available except during [illegible].

*[illegible] measurements of [illegible] Lone Pine, [illegible]*

| Date | Hydrographer | Gage height | Discharge | Date | Hydrographer | Gage height | Discharge |
|---|---|---|---|---|---|---|---|
| 1906 | | Feet | Sec.-ft. | 1908 | | Feet | Sec.-ft. |
| [illegible] | [illegible] | | [illegible] | [illegible] 24 | W. A. Lamb | [illegible] | [illegible] |
| [illegible] | do. | | [illegible] | [illegible] 9 | do. | [illegible] | [illegible] |
| [illegible] | do. | | [illegible] | 29 | [illegible] | [illegible] | [illegible] |
| May [illegible] | do. | | .6 | Nov. 30 | do. | [illegible] | [illegible] |
| [illegible] | do. | | .8 | | | | |
| June [illegible] | do. | | [illegible] | 1909. | | | |
| [illegible] | do. | | [illegible] | Jan. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do. | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do. | | [illegible] | Mar. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | do. | | [illegible] | 25 | do. | [illegible] | [illegible] |
| [illegible] | do. | | [illegible] | Apr. [illegible] | do. | [illegible] | [illegible] |
| Sept. [illegible] | do. | | 2.4 | May [illegible] | do. | [illegible] | [illegible] |
| | | | | [illegible] | do. | [illegible] | [illegible] |
| 1907 | | | | June [illegible] | do. | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | July 3 | do. | [illegible] | [illegible] |
| [illegible] | do. | 2 [illegible] | [illegible] | 30 | do. | [illegible] | [illegible] |
| [illegible] | do. | 2 [illegible] | [illegible] | Aug. 3 | do. | [illegible] | [illegible] |
| [illegible] | do. | 2 [illegible] | [illegible] | Sept. [illegible] | do. | [illegible] | [illegible] |
| [illegible] | do. | [illegible] | 4.[illegible] | Oct. [illegible] | do. | [illegible] | [illegible] |
| Aug. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | Nov. [illegible] | do. | [illegible] | [illegible] |
| Sept. [illegible] | do. | 1.21 | 2.[illegible] | | | | |
| [illegible] | do. | [illegible] | 2.[illegible] | 1910. | | | |
| Oct. [illegible] | do. | [illegible] | [illegible] | Mar. 3 | R. K. [illegible] | 1.36 | 3.5 |
| [illegible] | do. | [illegible] | 5.4 | 23 | do. | 1.40 | 4.0 |
| [illegible] | do. | 1.46 | 4.[illegible] | Apr. 13 | do. | 1.5[illegible] | 4.7 |
| | | | | May 4 | do. | 2.40 | 16 |
| 1908 | | | | 25c | do. | 2.15 | 11 |
| Jan. [illegible] | R. B. Post | 1.35 | 4.1 | June 29 | C. H. Lee | 1.66 | 2.9 |
| Mar. 4 | do. | 1.51 | 4.[illegible] | July 22b | Lee and Wood | 2.01 | 1.9 |
| Apr. [illegible] | do. | 1.97 | 10.0 | Aug. 17 | F. G. Wood | 1.92 | 1.5 |
| [illegible] | do. | 2.10 | 15.0 | Sept. 2 | do. | 1.80 | 1.2 |
| May [illegible] | do. | 1.91 | 11.0 | 21 | G. T. Peekema | 1.90 | 1.9 |
| June 4 | do. | 1.46 | 11.0 | Oct. 29 | do. | 2.09 | 1.9 |
| 14 | do. | 1.[illegible] | 7.0 | Dec. 1[illegible] | do. | 1.61 | 1.7 |
| July [illegible] | W. A. Lamb | 1.20 | 2.4 | | | | |
| [illegible] | do. | 1.24 | 2.6 | 1911. | | | |
| Aug. [illegible] | do. | 1.20 | 2.2 | Jan. 4 | G. T. Peekema | | 2.1 |
| Sept. 9 | do. | 1.15 | 1.8 | Feb. [illegible] | do. | | 5.[illegible] |

a Made by wading 20 feet above footbridge.
b Possible back-water effect from débris lodged below gage section during high water of July 18-19, 1910.
c Brush dam just below measuring section removed.

*Daily gage height, in feet, of Ash Creek near Lone Pine, Cal., for 1908.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 1.35 | | | | 1.9 | 1.4 | | | | | |
| 2 | | | 1.5 | 1.7 | | | | | | | | |
| 3 | | | | | | | | | 1.2 | | | |
| 4 | | 1.35 | 1.5 | | | 1.85 | | | | | | 1.3 |
| 5 | | | | 1.7 | | | 1.4 | | | | | |
| 6 | | | | | 1.85 | | | 1.2 | | | | |
| 7 | | | | | | | | | | | | 1.25 |
| 8 | | 1.35 | 1.5 | | | 1.9 | | | | | | |
| 9 | | | | 1.75 | | | | | 1.3 | | | 1.3 |
| 10 | | 1.35 | | | 1.9 | | 1.4 | | | | | |
| 11 | | | | | | 1.7 | | | | | | |
| 12 | | | 1.5 | 1.9 | | | | 1.2 | | | | |
| 13 | | | | | 1.9 | | | | 1.5 | | | 1.25 |
| 14 | | 1.3 | | | | | | | | | | |
| 15 | | | 1.5 | | 1.95 | | | | | | | 1.3 |
| 16 | | | | 1.85 | | 1.6 | 1.3 | 1.2 | 1.2 | | | |
| 17 | | 1.3 | | | | | | 1.2 | | | | |
| 18 | | | | | 2.0 | | | | | | | 1.3 |
| 19 | | | 1.7 | | | 1.55 | | | | 1.3 | | |
| 20 | | | | | | | | | | | 1.25 | |
| 21 | | 1.3 | | | | | | | | | | |
| 22 | | | 1.8 | | 2.0 | | | | | | | |
| 23 | | | | | | 1.55 | | | | | 1.25 | |
| 24 | | 1.4 | | | | | | | | | | |
| 25 | | | | | | | | | | | | |
| 26 | | | 1.75 | | 1.9 | | | | | | | |
| 27 | | | | 2.1 | | | | | 1.3 | | 1.25 | |
| 28 | | 1.55 | | | | 1.45 | | | | | | 1.3 |
| 29 | | | 1.7 | | | | | | | 1.25 | | |
| 30 | | | | | | | 1.2 | 1.2 | 1.3 | | | |
| 31 | 1.35 | | | | | | | | | | | |

*Rating table for Ash Creek near Lone Pine, Cal., for 1908.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 1.00 | 0.8 | 1.40 | 4.0 | 1.80 | 9.2 | 2.10 | 15.0 |
| 1.10 | 1.5 | 1.50 | 5.1 | 1.90 | 10.9 | 2.20 | 17.3 |
| 1.20 | 2.2 | 1.60 | 6.3 | 2.00 | 12.8 | 2.30 | 20.0 |
| 1.30 | 3.1 | 1.70 | 7.7 | | | | |

NOTE.—Table applicable only to open channel. It is based upon 15 discharge measurements made during 1908 and is well defined between gage heights 1.2 feet and 2.1 feet.

*Monthly discharge of Ash Creek near Lone Pine, Cal., for 1906–1909.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1906.** | | | | | |
| January | | | 1.7 | 105 | |
| February | | | 3.2 | 178 | |
| March | | | 4.5 | 277 | |
| April | | | 8.3 | 494 | |
| May | | | 14.8 | 910 | |
| June | | | 30.6 | 1,820 | |
| July | | | 25.3 | 1,560 | |
| August | | | 5.8 | 357 | |
| September | | | 4.0 | 238 | |
| The period | | | | 5,940 | |
| **1906-7.** | | | | | |
| October | | | 3.0 | 184 | |
| November | | | 2.5 | 149 | |
| December | | | 2.2 | 135 | |
| January | | | 2.5 | 154 | D. |

*Monthly discharge of Ash Creek near Lone Pine, Cal., for 1906–1909*—Continued.

| Month | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| **1906–7** | | | | | |
| February | | | 2.5 | 139 | D |
| March | | | 2.5 | 154 | D |
| April | | | 20 | 1,190 | D |
| May | | | 39.4 | 2,420 | B. |
| June | | | 29.4 | 1,750 | B. |
| July | | | 5.5 | 338 | B. |
| August | | | 3.5 | 215 | C |
| September | | | 2.5 | 149 | D |
| The year | | | 9.62 | 6,360 | |
| **1907–8.** | | | | | |
| October | | | 4.0 | 246 | D |
| November | | | 4.5 | 268 | D |
| December | | | 4.0 | 246 | D |
| January | | | 4.0 | 246 | D |
| February | 5.7 | 3.1 | 3.7 | 213 | C. |
| March | 9.2 | 5.1 | 6.6 | 406 | C. |
| April | 15 | 7.7 | 10.9 | 649 | C. |
| May | 13 | 10 | 11.5 | 707 | C. |
| June | 11 | 4.6 | 7.3 | 434 | C. |
| July | 4 | 2.2 | 3.2 | 197 | D. |
| August | 2.2 | 2.2 | 2.2 | 135 | D |
| September | 5.1 | 2.2 | 3.0 | 179 | D |
| The year | | | 5.41 | 3,920 | |
| **1908–9** | | | | | |
| October | 3.1 | 2.6 | 3.0 | 184 | D |
| November | 2.6 | 2.6 | 2.6 | 155 | D |
| December | 3.1 | 2.6 | 3.0 | 184 | C |
| January | | | 3.2 | 197 | C. |
| February | | | 4.5 | 250 | C. |
| March | | | 6.3 | 387 | C. |
| April | | | 14.0 | 833 | C |
| May | | | 33.6 | 2,070 | C. |
| June | | | 48.7 | 2,900 | C. |
| July | | | 13.2 | 812 | C. |
| August | | | 5.4 | 332 | C. |
| September | | | 3.8 | 226 | C. |
| The year | | | 11.9 | 8,590 | |
| **1909.** | | | | | |
| October | | | 3.6 | 221 | C. |
| November | | | 3.5 | 208 | C. |
| December | | | 3.5 | 215 | C. |

NOTE.—Discharge estimated by comparison with neighboring streams or interpolated between discharge measurements except during 1908.

## MISCELLANEOUS MEASUREMENTS.

The following measurements have been made on streams and ditches in the Owens River basin:

*Miscellaneous measurements in Owens River drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| July 24, 1907 | Owens River | Thompson ranch, Long Valley | 217 |
| May 13, 1908 | do | Citrus, Cal | 44 |
| May 28, 1908 | do | do | 46 |
| June 3, 1908 | do | do | 40 |
| May 18, 1908 | do | Alabama Hills | 50 |
| May 28, 1908 | do | do | 51 |
| June 3, 1908 | do | do | 45 |
| Aug. 28, 1910 | do | Hand ranch | 78 |
| Oct. 31, 1903 | Ash Creek | Olancha, Cal | 1.2 |
| May 5, 1904 | do | do | 3.0 |
| June 19, 1905 | do | Base of foothills | 10.6 |
| July 19, 1905 | do | do | 1.8 |
| Aug. 14, 1903 | Big Pine Creek | Big Pine | 112 |
| Oct. 12, 1903 | do | do | 16.4 |

*Miscellaneous measurements in Owens River drainage basin*—Continued.

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| Oct. 10, 1903 | Birch Creek | Bishop, Cal | 5.0 |
| Apr. 1, 1904 | ....do | ....do | 4.8 |
| Apr. 5, 1904 | ....do | ....do | 5.0 |
| Aug. 1, 1905 | ....do | ....do | 12 |
| Oct. 13, 1903 | ....do | Fish Springs | 3.5 |
| Apr. 5, 1904 | ....do | ....do | 5.0 |
| May 19, 1909 | Birch Creek No. 2 | South edge of Round Valley | 7.1 |
| June 29, 1909 | ....do | ....do | 22.6 |
| Nov. 4, 1909 | ....do | ....do | 7.74 |
| June 18, 1904 | Bishop Creek, North Fork | Bishop | 81 |
| Dec. 12, 1906 | Black Rock Springs | Near Independence | 27 |
| Feb. 19, 1907 | ....do | ....do | 27 |
| Mar. 12, 1908 | ....do | ....do | 24 |
| May 21, 1907 | Carroll Creek | Lone Pine-Olancha road crossing | 5.4 |
| June 4, 1907 | ....do | ....do | 7.5 |
| June 25, 1907 | ....do | ....do | 4.2 |
| July 8, 1907 | ....do | ....do | 2.0 |
| May 28, 1908 | ....do | ....do | 1.4 |
| June 19, 1909 | ....do | ....do | 7.14 |
| May 25, 1910 | ....do | ....do | 1.2 |
| Oct. 13, 1903 | Clear Creek | Black Rock | 1.7 |
| Apr. 5, 1904 | ....do | ....do | 6.4 |
| June 14, 1905 | ....do | Near Big Pine | 10.4 |
| July 17, 1905 | ....do | ....do | 5.5 |
| Aug. 4, 1902 | Convict Creek | Bishop road crossing | 37 |
| July 18, 1907 | ....do | Long Valley | 188 |
| Oct. 31, 1903 | Cottonwood Creek | Near Olancha | 7.6 |
| May 5, 1904 | ....do | ....do | 21 |
| June 10, 1904 | ....do | ....do | 30 |
| June 16, 1905 | ....do | ....do | 91 |
| July 20, 1905 | ....do | ....do | 30 |
| Nov. 10, 1905 | ....do | ....do | 4.3 |
| Sept. 26, 1906 | ....do | Near Lone Pine | 25 |
| Jan. 31, 1907 | ....do | Below junction of South Fork | 13 |
| Sept. 28, 1907 | ....do | Intake Los Angeles Aqueduct pipe line. | 13 |
| Nov. 8, 1907 | ....do | ....do | 25 |
| Nov. 23, 1907 | ....do | ....do | 17 |
| Oct. 12, 1903 | Coyote Creek | Bishop | 1.6 |
| Apr. 4, 1904 | ....do | ....do | 2.0 |
| Mar. 8, 1907 | ....do | ½ mile above junction with Bishop Creek. | .3 |
| Apr. 29, 1907 | ....do | ....do | 16 |
| July 23, 1907 | Crooked Creek | Long Valley | 15 |
| Oct. 13, 1903 | Division Creek | Near Independence | 2.5 |
| Apr. 5, 1904 | ....do | Black Rock Springs | 2.5 |
| June 14, 1905 | ....do | Near Independence | 3.3 |
| July 17, 1905 | ....do | ....do | 2.1 |
| Dec. 2, 1905 | ....do | ....do | 5.4 |
| Feb. 19, 1907 | ....do | Mouth of canyon | 13 |
| Dec. 4, 1905 | Fish Springs | Near Big Pine | 29 |
| Dec. 7, 1906 | ....do | ....do | 36 |
| Feb. 8, 1907 | ....do | ....do | 25 |
| Oct. 14, 1903 | George Creek | Near Independence | .8 |
| May 4, 1904 | ....do | ....do | 2.4 |
| June 15, 1905 | ....do | ....do | 24 |
| Sept. 7, 1906 | ....do | ....do | 25 |
| Oct. 30, 1906 | ....do | ....do | 4.8 |
| Oct. 13, 1903 | Goodale Creek | Black Rock | 6.6 |
| Apr. 5, 1904 | ....do | ....do | 2.1 |
| June 14, 1905 | ....do | Near Aberdeen (Tibbetts) | 5.9 |
| July 17, 1905 | ....do | ....do | 3.5 |
| Aug 22, 1905 | ....do | ....do | 3.4 |
| Nov. 17, 1905 | ....do | ....do | 4.6 |
| July 18, 1907 | Hilton Creek | Long Valley | 44 |
| Apr. 28, 1904 | Horton Creek | Round Valley | 5 |
| Jan. 24, 1907 | ....do | Round Valley-Bishop road crossing | 11 |
| Mar. 11, 1907 | ....do | ....do | 2 |
| June 19, 1908 | ....do | ....do | 6.6 |
| July 16, 1908 | ....do | ....do | 12 |
| Aug. 3, 1908 | ....do | ....do | 20 |
| Aug. 25, 1908 | ....do | ....do | 6.2 |
| Sept. 16, 1908 | ....do | ....do | 8.6 |
| Oct. 7, 1908 | ....do | ....do | 5.3 |
| Oct. 22, 1908 | ....do | ....do | 13 |
| Nov. 6, 1908 | ....do | ....do | 12 |
| Nov. 25, 1908 | ....do | ....do | 13 |
| Jan. 22, 1909 | ....do | ....do | 29.9 |
| Feb. 12, 1909 | ....do | ....do | 21.6 |
| Feb. 28, 1909 | ....do | ....do | 11.3 |
| Mar. 19, 1909 | ....do | ....do | 3.9 |
| Apr. 8, 1909 | ....do | ....do | 3.19 |

[illegible]

| Date. | Stream. | Locality. | Discharge. |
| --- | --- | --- | --- |
| [illegible] | [illegible] Creek | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | 1 |
| [illegible] | [illegible] Creek | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | Near [illegible] | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | 1 |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | Near [illegible] | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | 141 |
| [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | [illegible] Round Valley | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | [illegible] Creek | Near Independence | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | Oak Creek | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | Oak Creek, North Fork | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | Oak Creek, South Fork | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | [illegible] Creek | Mouth of canyon, Round Valley | [illegible] |
| [illegible] | [illegible] Creek | Below [illegible] Creek, [illegible] | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | 30 |
| [illegible] | do | do | 30 |
| [illegible] | do | do | [illegible] |
| [illegible] | [illegible] Creek | Near Independence | [illegible] |
| [illegible] | [illegible] | Near Barnes Butte | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | Shepard Creek | Near Independence | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | Near Independence, at mouth of canyon. | [illegible] |
| Do | do | Near Independence, at fork 4 miles east of canyon. | [illegible] |
| [illegible] | Symmes Creek | Near Independence | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | 13 |
| [illegible] | do | do | 15 |
| [illegible] | do | do | 1.8 |
| [illegible] | do | do | 1.1 |
| [illegible] | do | do | 2.1 |
| [illegible] | do | do | 2.3 |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | 5.42 |
| [illegible] | do | do | 18.5 |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | 26.1 |

*Miscellaneous measurements in Owens River drainage basin*—Continued.

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| July 16, 1909 | Symmes Creek | Near Independence | 16.1 |
| Aug. 23, 1909 | ....do | ....do | 3.43 |
| May 19, 1910 | ....do | ....do | 3.5 |
| June 22, 1910 | ....do | ....do | 3.8 |
| July 16, 1910 | ....do | ....do | *a* .1 |
| Aug. 8, 1910 | ....do | ....do | 1.6 |
| Sept. 7, 1910 | ....do | ....do | .0 |
| Oct. 13, 1903 | Taboose Creek | Black Rock | 4.8 |
| Apr. 5, 1904 | ....do | ....do | 4.2 |
| June 14, 1905 | ....do | Near Aberdeen (Tibbetts) | 17.8 |
| July 17, 1905 | ....do | ....do | 12 |
| Aug. 24, 1905 | ....do | ....do | 5 |
| Nov. 17, 1905 | ....do | ....do | 3.8 |
| Dec. 2, 1905 | ....do | ....do | 4.6 |
| Dec. 8, 1906 | ....do | ....do | 5.4 |
| Jan. 24, 1907 | ....do | ....do | 3.4 |
| Nov. 17, 1906 | Thibaut Creek | ....do | 1.6 |
| Aug. 12, 1910 | ....do | 1 mile west of road from Independence to Big Pine. | *a* .15 |
| Sept. 6, 1910 | ....do | ....do | *a* .20 |
| Oct. 13, 1903 | Tinemaha Creek | Fish Springs | 3.6 |
| Apr. 5, 1904 | ....do | ....do | 4.0 |
| June 14, 1905 | ....do | Near Tinemaha | 19.5 |
| July 17, 1905 | ....do | ....do | 14.8 |
| Dec. 2, 1905 | ....do | ....do | 3.1 |
| Oct. 15, 1903 | Tuttle Creek | Near Lone Pine | 2.3 |
| May 5, 1904 | ....do | ....do | 3.0 |
| June 16, 1905 | ....do | ....do | 10.8 |
| July 19, 1905 | ....do | ....do | 10.8 |
| July 22, 1909 | A. O. Collins canal | 3 miles east of Bishop | 29.3 |
| Feb. 9, 1907 | Big Pine canal | Near Center School | 31 |
| May 1, 1907 | ....do | ....do | 38 |
| Apr. 30, 1907 | Bishop Creek canal | 3 miles above Bishop | 97 |
| Jan. 22, 1907 | Blake & Miller canal | ½ mile below headgate | 50 |
| May 16, 1907 | ....do | ....do | 12.2 |
| May 11, 1907 | Dell canal | Flume 3 miles below headgate | 26 |
| July 24, 1909 | ....do | 2¼ miles east of road crossing | 13.1 |
| May 16, 1908 | East Side canal | Citrus, Cal | 9.1 |
| May 26, 1908 | ....do | ....do | 12 |
| June 3, 1908 | ....do | ....do | 15 |
| Apr. 30, 1907 | Farmers canal | 3 miles above Bishop | 29 |
| July 22, 1909 | ....do | ....do | 20.4 |
| May 1, 1907 | Geo. Collins canal | ....do | 9.9 |
| July 22, 1909 | ....do | ....do | 5.9 |
| July 30, 1903 | Hillside canal | Bishop | 3.8 |
| Aug. 5, 1903 | ....do | ....do | 1.9 |
| Aug. 15, 1903 | ....do | ....do | 2.3 |
| Sept. 7, 1903 | ....do | ....do | 2.7 |
| Sept. 15, 1903 | ....do | ....do | 2.9 |
| Apr. 21, 1904 | ....do | ....do | 8.4 |
| July 11, 1904 | ....do | ....do | 5.0 |
| Aug. 10, 1904 | ....do | ....do | 6.3 |
| Nov. 17, 1904 | ....do | ....do | 11.5 |
| Aug. 10, 1909 | South Hillside canal | 1 mile west of gaging station | 18 |
| Do | Upper North Hillside canal | ¾ mile west of gaging station | 14.5 |
| Do | Lower North Hillside canal | ¼ mile west of gaging station | 4.7 |
| Apr. 12, 1904 | Hughes ditch | Bishop | 1.5 |
| Oct. 1, 1904 | ....do | ....do | .3 |
| Oct. 10, 1904 | ....do | ....do | 3.0 |
| Nov. 3, 1904 | ....do | ....do | 2.2 |
| Feb. 20, 1904 | Indian ditch | ....do | 12.1 |
| Aug. 5, 1903 | Love's ditch | ....do | .9 |
| Aug. 15, 1903 | ....do | ....do | .5 |
| Sept. 5, 1903 | ....do | ....do | 1.5 |
| Sept. 15, 1903 | ....do | ....do | 2.4 |
| May 14, 1904 | ....do | ....do | 5.6 |
| Apr. 21, 1904 | ....do | ....do | 4.2 |
| July 11, 1904 | ....do | ....do | 3.8 |
| May 13, 1907 | McNally canal | Intake 3¾ miles north of Bishop | 61 |
| July 22, 1909 | ....do | 3 miles north and 1 mile west of Bishop. | 16.1 |
| Apr. 30, 1907 | Owens River canal | Sec. 27, T. 6 S., R. 32 E., Mount Diablo meridian. | 42 |
| July 23, 1909 | ....do | 300 feet south of road crossing | 73.4 |
| May 1, 1907 | Rawson canal | County bridge 2½ miles east of Bishop. | 36 |
| July 24, 1909 | Sanger canal | ¼ mile east of Alvord | 18.4 |
| May 16, 1908 | Stevens canal | Citrus, Cal | 9.7 |
| May 26, 1908 | ....do | ....do | 9.7 |
| June 3, 1908 | ....do | ....do | 11 |
| Apr. 13, 1907 | Williams canal | Williams ranch | 5 |

*a* Estimated.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] discharge measurements were made [illegible]

measurements [illegible]

[illegible] discharge measurements [illegible]

[illegible] continued [illegible] 1905 [illegible] established [illegible] discharge [illegible] stream [illegible] between [illegible] stream is constantly changing [illegible] different [illegible]

[illegible]

[illegible]

*Discharge measurements of Mohave River at Victorville, Cal., in 1899–1906*—Continued.

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| Feb. 6 | P. H. Leahy | | 59 | Aug. 2 | P. H. Leahy | | 34 |
| 14 | do | | 57 | 5 | do | | 31 |
| 21 | do | | 67 | 9 | do | | 32 |
| 28 | do | | 74 | 12 | do | | 33 |
| Mar. 7 | do | | 75 | 16 | do | | 31 |
| 14 | do | | 69 | 19 | do | | 46 |
| 21 | do | | 74 | 23 | do | | 42 |
| 31 | do | | [a] 13,413 | 26 | do | | 35 |
| Apr. 1 | do | | [a] 3,760 | 30 | do | | 33 |
| 4 | do | | [a] 1,135 | Sept. 3 | do | | 36 |
| 15 | do | | [a] 262 | 6 | do | | 36 |
| 18 | do | | [a] 458 | 9 | do | | 34 |
| 25 | do | | [a] 418 | 15 | do | | 31 |
| May 9 | do | | 54 | 17 | do | | 33 |
| 16 | do | | 50 | 20 | do | | 32 |
| 23 | do | | 47 | 26 | do | | 39 |
| 30 | do | | 45 | 30 | do | | 34 |
| June 6 | do | | 45 | Oct. 4 | do | | 41 |
| 13 | do | | 38 | 7 | do | | 47 |
| 20 | do | | 35 | 11 | do | | 49 |
| 27 | do | | 34 | 15 | do | | 49 |
| July 3 | do | | 38 | 18 | do | | 48 |
| 11 | do | | 40 | 22 | do | | 53 |
| 18 | do | | 39 | 25 | do | | 51 |
| 31 | do | | 32 | 28 | do | | 52 |
| Aug. 8 | do | | 52 | Nov. 1 | do | | 54 |
| 15 | do | | 34 | 4 | do | | 48 |
| 24 | do | | 37 | 8 | do | | 47 |
| Sept. 14 | do | | 36 | 11 | do | | 49 |
| 21 | do | | 45 | 15 | do | | 47 |
| 28 | do | | 52 | 18 | do | | 47 |
| Oct. 8 | do | | 55 | 22 | do | | 51 |
| 19 | do | | 49 | 25 | do | | 52 |
| 26 | do | | 54 | 29 | do | | 53 |
| 31 | do | | 51 | Dec. 2 | do | | 53 |
| Nov. 8 | do | | 53 | 6 | do | | 53 |
| 14 | do | | 57 | 9 | do | | 66 |
| 21 | do | | 54 | 13 | do | | 70 |
| 28 | do | | 59 | 16 | do | | 56 |
| Dec. 5 | do | | 58 | 20 | do | | 59 |
| 12 | do | | 60 | 23 | do | | 59 |
| 21 | do | | 55 | 27 | do | | 59 |
| 29 | do | | 59 | 30 | do | | 58 |
| 1904. | | | | 1905. | | | |
| Jan. 7 | P. H. Leahy | | 62 | Jan. 3 | P. H. Leahy | | 56 |
| 16 | do | | 67 | 6 | do | | 58 |
| 23 | do | | 58 | 10 | do | | 70 |
| 28 | do | | 45 | 13 | do | | 71 |
| 30 | do | | 62 | 17 | do | | 59 |
| Feb. 7 | do | | 57 | 20 | do | | 59 |
| 15 | do | | 62 | 25 | do | | 56 |
| 20 | do | | 52 | 27 | do | | 53 |
| 29 | do | | 54 | 31 | do | | 56 |
| Mar. 5 | do | | 68 | Feb. 5 | do | | 822 |
| 14 | do | | 51 | 8 | do | | 82 |
| 28[b] | do | | 60 | 11 | do | | 90 |
| Apr. 6 | do | | 49 | 15 | do | | 2,032 |
| 16 | do | | 41 | 18 | do | | 97 |
| 25 | do | | 42 | 21 | do | | 95 |
| 30 | do | | 40 | Mar. 2 | do | 3.96 | 98 |
| May 8 | do | | 46 | 3 | E. C. La Rue | 3.92 | 90 |
| 16 | do | | 48 | 6 | P. H. Leahy | 3.85 | 91 |
| 23 | do | | 51 | 11 | do | 3.77 | 74 |
| 31 | do | | 44 | 13 | do | 9.90 | 5,410 |
| June 6 | do | | 43 | 15 | do | 4.50 | 820 |
| 14 | do | | 40 | 16 | O. W. Peterson | 4.95 | 2,350 |
| 21 | do | | 30 | 18 | P. H. Leahy | 4.06 | 980 |
| 27 | do | | 37 | 22 | do | 4.04 | 740 |
| 28 | W. B. Clapp | | 28 | 25 | do | | 460 |
| July 2 | P. H. Leahy | | 36 | 27 | do | 4.0 | 340 |
| 12 | do | | 29 | 31 | do | 3.91 | 290 |
| 15 | do | | 30 | Apr. 6 | R. S. Hawley | 3.75 | 133 |
| 18 | do | | 32 | 8 | P. H. Leahy | 3.75 | 133 |
| 22 | do | | 32 | 11 | do | 3.7 | 123 |
| 26 | do | | 40 | 14 | do | 3.66 | 104 |
| 29 | do | | 34 | 18 | do | 3.58 | 93 |

[a] Float measurement.

[b] Small flood discharge on Mar. 23, of which measurement was not obtained on account of poor conditions. Estimated discharge 500 second-feet for short period. Stream soon assumed natural conditions.

*Discharge measurements of Mohave River at Victorville, Cal., in 1899–1906*—Continued.

| Date | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-ft.* |
| Apr. 24 | P. H. Leahy | 2.5 | 60 |
| 25 | H. S. Hawley | 3.5 | 26 |
| 29 | P. H. Leahy | 2.46 | 56 |
| May 3 | do | 3.76 | 151 |
| 6 | do | 3.98 | 218 |
| 10 | do | 4.00 | 227 |
| 13 | do | | 200 |
| 16 | do | | 152 |
| 20 | do | 2.98 | 50 |
| 23 | do | | 65 |
| 27 | do | | 55 |
| 29 | do | | 48 |
| June 2 | do | | 63 |
| 6 | do | | 51 |
| 10 | do | | 46 |
| 13 | do | | 30 |
| 16 | do | | 43 |
| 20 | do | | 43 |
| 27 | do | | 30 |
| 30 | do | | 35 |
| July 3 | do | | 36 |
| 7 | do | | 32 |
| 11 | do | | 31 |
| 14 | do | | 27 |
| 18 | do | | 26 |
| 21 | do | | 32 |
| 25 | do | | 30 |
| 28 | do | | 24 |
| Aug. 2 | do | | 30 |
| 5 | do | | 29 |
| 25 | do | | 26 |
| 28 | do | | 29 |
| 31 | do | | 35 |
| Sept. 1 | do | | 47 |
| 5 | do | | 35 |
| 8 | do | | 35 |
| 11 | do | | 37 |
| 15 | do | | 42 |
| 19 | do | | 43 |
| 22 | do | | 43 |
| 26 | do | | 42 |
| 29 | do | | 42 |
| Oct. 3 | do | | 40 |
| 6 | do | | 49 |
| 10 | do | | 41 |
| 13 | do | | 44 |
| 17 | do | | 44 |
| 20 | do | | 54 |
| 24 | do | | 51 |
| 27 | do | | 50 |
| 31 | do | 4.20 | 49 |
| Nov. 3 | do | 4.20 | 46 |
| 7 | do | 4.29 | 81 |
| 10 | do | 4.21 | 66 |
| 14 | do | 4.20 | 62 |
| 17 | do | 4.16 | 58 |
| 22 | do | 4.15 | 65 |
| 24 | do | 4.16 | 73 |
| 28 | do | 4.15 | 67 |
| Dec. 1 | do | 4.16 | 65 |
| 5 | do | 4.09 | 72 |
| 8 | do | 4.09 | 67 |
| 12 | do | 4.02 | 65 |
| 1904. | | *Feet.* | *Sec.-ft.* |
| Dec. 15 | P. H. Leahy | 4.12 | 73 |
| 19 | do | 4.15 | 71 |
| 22 | do | 4.05 | 67 |
| 26 | do | 4.08 | 56 |
| 29 | do | 4.08 | 56 |
| 1905. | | | |
| Jan. 2 | P. H. Leahy | 4.08 | 65 |
| 6 | do | | 63 |
| 9 | do | 4.13 | 67 |
| 12 | do | 4.09 | 66 |
| 16 | do | | 66 |
| 20 | do | 4.17 | 46 |
| 23 | do | 4.11 | 52 |
| 26 | do | 4.10 | 72 |
| 31 | do | 4.10 | 65 |
| Feb. 2 | do | 4.10 | 64 |
| 6 | do | 4.10 | 71 |
| 10 | do | 4.10 | 78 |
| 13 | do | 4.11 | 64 |
| 17 | do | 4.11 | 50 |
| 21 | do | 4.12 | 79 |
| 24 | do | 4.12 | 85 |
| 27 | do | 4.08 | 70 |
| Mar. 2 | do | 4.11 | 67 |
| 7 | do | 4.11 | 52 |
| 9 | do | 4.10 | 55 |
| 12 | do | 7.40 | 9,300 |
| 18 | do | 4.15 | 1,630 |
| 20 | do | 4.11 | [illegible] |
| 23 | do | 4.45 | 552 |
| 25 | do | 6.25 | 4,550 |
| 26 | do | 5.60 | 5,770 |
| 27 | Burrage and Leahy | 4.90 | 2,100 |
| 27 | do | 4.90 | 1,880 |
| 28 | do | 4.40 | 1,240 |
| 29 | P. H. Leahy | 4.30 | 1,410 |
| 31 | do | 4.20 | 965 |
| Apr. 2 | do | 4.60 | 662 |
| 6 | do | 4.50 | 647 |
| 10 | do | 4.50 | 525 |
| 13 | do | 4.30 | 401 |
| 17 | do | 4.20 | 348 |
| 20 | do | 4.20 | 273 |
| 24 | do | 4.10 | 302 |
| 28 | do | 4.20 | 222 |
| May 1 | do | 4.20 | 227 |
| 3 | do | 4.20 | 202 |
| 11 | do | 4.00 | 123 |
| 19 | do | 4.00 | 42 |
| 25 | do | 4.02 | 44 |
| June 1 | do | 4.40 | 187 |
| 10 | do | 4.00 | 74 |
| 17 | do | 3.92 | 32 |
| 24 | do | 4.05 | 38 |
| 29 | do | 4.16 | 29 |
| July 5 | do | 4.24 | 27 |
| 13 | do | 4.31 | 28 |
| 19 | do | 4.32 | 33 |
| 22 | do | 4.36 | 33 |
| 29 | do | 4.41 | 31 |
| 31 | W. B. Clapp | 4.39 | 23 |
| Nov. 12 | W. F. Martin | | 41 |

*Daily gage height, in feet, of Mohave River at Victorville, Cal., for 1899–1901 and 1905.*

| Day. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1899. | | | | | | | | |
| 1 | | 1.0 | 1.1 | 1.0 | 1.0 | 0.9 | 0.9 | 0.85 |
| 2 | | 1.0 | 1.1 | 1.0 | .9 | .9 | .85 | .85 |
| 3 | | 1.0 | 1.0 | .9 | 1.0 | .9 | .85 | .85 |
| 4 | | 1.0 | 1.0 | .9 | .9 | .9 | .85 | .85 |
| 5 | | 1.0 | 1.0 | .9 | .9 | .9 | .85 | .85 |
| 6 | | 1.0 | .9 | .9 | .9 | .9 | .85 | .85 |
| 7 | | .9 | 1.0 | 1.0 | .9 | .9 | .85 | .85 |
| 8 | | .9 | 1.0 | 1.0 | .9 | .9 | .85 | .85 |
| 9 | | 1.0 | .9 | 1.0 | .9 | .9 | .9 | .85 |
| 10 | | 1.0 | 1.0 | .9 | .9 | .9 | .9 | .85 |

*Daily gage height, in feet, of Mohave River at Victorville, Cal., for 1899–1901 and 1905*—Continued.

| Day. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1899. | | | | | | | | |
| 11 | ........ | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.85 |
| 12 | ........ | 1.0 | 1.0 | .9 | .9 | .9 | .9 | .85 |
| 13 | ........ | .9 | .9 | 1.0 | .9 | .9 | .85 | .85 |
| 14 | ........ | .9 | 1.0 | 1.0 | .9 | .9 | .85 | .85 |
| 15 | ........ | .9 | 1.0 | 1.0 | .9 | .9 | .85 | .85 |
| 16 | ........ | 1.0 | .9 | 1.0 | .9 | .9 | .85 | .85 |
| 17 | ........ | 1.0 | .9 | .9 | .9 | .9 | .9 | .85 |
| 18 | ........ | 1.1 | 1.0 | 1.0 | .9 | .9 | .9 | .85 |
| 19 | ........ | .9 | 1.0 | 1.0 | .9 | .9 | .8 | .85 |
| 20 | ........ | .9 | 1.0 | 1.0 | .9 | .9 | .85 | .85 |
| 21 | ........ | 1.1 | 1.0 | 1.0 | .9 | .9 | .85 | .85 |
| 22 | ........ | 1.0 | .9 | 1.0 | .9 | .9 | .85 | .85 |
| 23 | ........ | 1.0 | 1.0 | 1.0 | .9 | .9 | .85 | .85 |
| 24 | ........ | 1.0 | 1.0 | 1.0 | .9 | .9 | .85 | .85 |
| 25 | ........ | 1.0 | 1.0 | 1.0 | .9 | .9 | .85 | .85 |
| 26 | ........ | 1.0 | 1.0 | .9 | .9 | .85 | .9 | .85 |
| 27 | 1.0 | .9 | .9 | .9 | .9 | .85 | .9 | .85 |
| 28 | 1.0 | 1.0 | 1.0 | .9 | .9 | .85 | .85 | .85 |
| 29 | ........ | 1.0 | 1.0 | 1.0 | .9 | .85 | .85 | .85 |
| 30 | ........ | .9 | 1.0 | 1.0 | .9 | .85 | .85 | .85 |
| 31 | ........ | 1.0 | ........ | 1.0 | ........ | .85 | .85 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1899–1900. | | | | | | | | | | | | |
| 1 | 0.85 | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 | 1.0 | 0.9 | 0.9 | 0.8 | 0.85 | 0.85 |
| 2 | .85 | .9 | .9 | 1.0 | 1.1 | 1.1 | 1.0 | .9 | .9 | .8 | .85 | .85 |
| 3 | .85 | .9 | .9 | 1.0 | 1.1 | 1.2 | 1.0 | .9 | .9 | .8 | .85 | .85 |
| 4 | .85 | .9 | .9 | 1.0 | 1.1 | 1.2 | 1.0 | .9 | .9 | .8 | .85 | .85 |
| 5 | .85 | .9 | .9 | 1.0 | 1.1 | 1.2 | 1.0 | .9 | .9 | .8 | .85 | .85 |
| 6 | .85 | .9 | .9 | 1.0 | 1.1 | 1.2 | .9 | .9 | .9 | .8 | .85 | .85 |
| 7 | .85 | .85 | .9 | 1.0 | 1.1 | 1.1 | .9 | .9 | .9 | .8 | .85 | .85 |
| 8 | .85 | .85 | .9 | 1.0 | 1.1 | 1.1 | .9 | .9 | .9 | .8 | .85 | .85 |
| 9 | .85 | .85 | .9 | 1.0 | 1.1 | 1.1 | .9 | .9 | .9 | .8 | .85 | .85 |
| 10 | .85 | .85 | .9 | 1.0 | 1.0 | 1.1 | .9 | .9 | .9 | .8 | .85 | .85 |
| 11 | .9 | .85 | .9 | 1.0 | 1.0 | 1.1 | .9 | .9 | .9 | .8 | .85 | .85 |
| 12 | .8 | .85 | .9 | 1.0 | 1.0 | 1.1 | .9 | .9 | .9 | .8 | .85 | .85 |
| 13 | .85 | .9 | .9 | 1.0 | 1.0 | 1.1 | .9 | .9 | .9 | .8 | .85 | .85 |
| 14 | .85 | 1.0 | ....... | 1.0 | 1.0 | 1.1 | .9 | .9 | .9 | .8 | .85 | .85 |
| 15 | .85 | .9 | ....... | 1.0 | 1.0 | 1.0 | .9 | .9 | .9 | .8 | .85 | .85 |
| 16 | .85 | .9 | ....... | 1.0 | 1.0 | 1.0 | .9 | .9 | .9 | .8 | .85 | .85 |
| 17 | .85 | .9 | ....... | 1.0 | 1.0 | 1.0 | .9 | .9 | .9 | .8 | .85 | .85 |
| 18 | .85 | .9 | ....... | 1.0 | 1.0 | 1.0 | .9 | .9 | .9 | .8 | .85 | .85 |
| 19 | .85 | .9 | ....... | 1.0 | 1.0 | 1.0 | .9 | .9 | .85 | .8 | .85 | .85 |
| 20 | .85 | .9 | ....... | 1.0 | 1.0 | 1.0 | .9 | .9 | .85 | .8 | .85 | .85 |
| 21 | .85 | .9 | ....... | 1.0 | 1.0 | 1.0 | .9 | .9 | .85 | .8 | .85 | .85 |
| 22 | .85 | .9 | ....... | 1.0 | 1.0 | 1.0 | .9 | .9 | .8 | .85 | .85 | .85 |
| 23 | .85 | .9 | ....... | 1.0 | 1.0 | 1.1 | .9 | .9 | .8 | .85 | .85 | .85 |
| 24 | .85 | .9 | ....... | 1.0 | 1.0 | 1.1 | .9 | .9 | .8 | .85 | .85 | .85 |
| 25 | .85 | .9 | ....... | 1.0 | 1.0 | 1.1 | .9 | .9 | .8 | .85 | .85 | .85 |
| 26 | .85 | .9 | ....... | 1.0 | 1.0 | 1.1 | .9 | .9 | .8 | .85 | .85 | .85 |
| 27 | .9 | .9 | ....... | 1.0 | 1.0 | 1.1 | .9 | .9 | .8 | .85 | .85 | .85 |
| 28 | .9 | .9 | ....... | 1.0 | 1.0 | 1.1 | .9 | .9 | .8 | .85 | .85 | .85 |
| 29 | .9 | .9 | ....... | 1.0 | ....... | 1.1 | .9 | .9 | .8 | .85 | .85 | .85 |
| 30 | .9 | .9 | ....... | 1.0 | ....... | 1.0 | .9 | .9 | .8 | .85 | .85 | .85 |
| 31 | .9 | ....... | ....... | 1.0 | ....... | 1.0 | ....... | .9 | ....... | .85 | .85 | ....... |
| 1900–1901. | | | | | | | | | | | | |
| 1 | .85 | .9 | .9 | .9 | .9 | 1.4 | .9 | .9 | .85 | .9 | .9 | .9 |
| 2 | .85 | .9 | .9 | .9 | .9 | 1.4 | .9 | .9 | .85 | .9 | .9 | .9 |
| 3 | .85 | .9 | .9 | .9 | .9 | 1.3 | .9 | .9 | .85 | .9 | .9 | .9 |
| 4 | .85 | .9 | .9 | .9 | .9 | 1.3 | .9 | .9 | .85 | .9 | .9 | .9 |
| 5 | .85 | .9 | .9 | .9 | 2.6 | 1.2 | .9 | .85 | .85 | .9 | .9 | .9 |
| 6 | .85 | .9 | .9 | .9 | 4.0 | 1.2 | .9 | .85 | .85 | .9 | .9 | .9 |
| 7 | .85 | .9 | .9 | 3.6 | 2.0 | 1.2 | .9 | .85 | .85 | .9 | .9 | .9 |
| 8 | .85 | .9 | .9 | 1.0 | 1.6 | 1.2 | .9 | .85 | .85 | .9 | .9 | .9 |
| 9 | .9 | .9 | .9 | 1.0 | 1.0 | 1.2 | .9 | .85 | .9 | .9 | .9 | .9 |
| 10 | .9 | .9 | .9 | .9 | 1.0 | 1.0 | .9 | .85 | .9 | .9 | .9 | .9 |

[illegible]

| [illegible] | [illegible] | [illegible] | Aug. | Sept. |
|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| [illegible] | [illegible] | [illegible] |
|---|---|---|
| [illegible] | [illegible] | [illegible] |

| [illegible] | [illegible] | [illegible] |
|---|---|---|
| [illegible] | [illegible] | [illegible] |

*Monthly discharge of Mohave River at Victorville, Cal., for 1899–1905.*

[Drainage area, 400 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1899.** | | | | | | |
| March | 60 | 28 | 37 | 0.09 | 0.10 | 2,275 |
| April | 60 | 28 | 37 | .09 | .10 | 2,202 |
| May | 44 | 28 | 33 | .08 | .09 | 2,029 |
| June | 44 | 28 | 29 | .07 | .08 | 1,726 |
| July | 28 | 22 | 27 | .07 | .08 | 1,660 |
| August | 28 | 17 | 24 | .06 | .07 | 1,476 |
| September | 22 | 22 | 22 | .05 | .06 | 1,309 |
| The period | | | | | | 12,700 |
| **1899–1900.** | | | | | | |
| October | 28 | 17 | 23 | .06 | .07 | 1,414 |
| November | 44 | 22 | 27 | .07 | .08 | 1,607 |
| December | 44 | 28 | 32 | .08 | .09 | 1,970 |
| January | 44 | 44 | 44 | .11 | .13 | 2,705 |
| February | 60 | 44 | 49 | .12 | .13 | 2,721 |
| March | 80 | 44 | 57 | .14 | .16 | 3,505 |
| April | 44 | 33 | 35 | .09 | .10 | 2,083 |
| May | 33 | 33 | 33 | .08 | .09 | 2,029 |
| June | 33 | 25 | 30 | .08 | .09 | 1,785 |
| July | 29 | 25 | 26 | .06 | .07 | 1,599 |
| August | 29 | 29 | 29 | .07 | .08 | 1,783 |
| September | 29 | 29 | 29 | .07 | .08 | 1,726 |
| The year | 80 | 17 | 34.5 | .086 | 1.16 | 24,900 |
| **1900–1901.** | | | | | | |
| October | 33 | 29 | 32 | .08 | .09 | 1,968 |
| November | 3,200 | 33 | 139 | .35 | .39 | 8,271 |
| December | 33 | 33 | 33 | .08 | .09 | 2,029 |
| January | 4,180 | 50 | 183 | .46 | .53 | 11,252 |
| February | 4,820 | 50 | 925 | 2.31 | 2.41 | 51,372 |
| March | 660 | 50 | 178 | .45 | .52 | 10,945 |
| April | 44 | 44 | 44 | .11 | .12 | 2,618 |
| May | 49 | 49 | 49 | .12 | .14 | 3,013 |
| June | 42 | 42 | 42 | .11 | .12 | 2,499 |
| July | 40 | 40 | 40 | .10 | .12 | 2,460 |
| August | 50 | 50 | 50 | .13 | .15 | 3,074 |
| September | 55 | 55 | 55 | .14 | .16 | 3,273 |
| The year | 4,820 | 29 | 148 | .370 | 4.84 | 103,000 |
| **1901–2.** | | | | | | |
| October | 69 | 69 | 69 | .17 | .20 | 4,243 |
| November | 77 | 77 | 77 | .19 | .21 | 4,582 |
| December | 73 | 73 | 73 | .18 | .21 | 4,489 |
| January | 53 | 47 | 50 | .13 | .15 | 3,074 |
| February | 63 | 58 | 60 | .15 | .16 | 3,332 |
| March | 66 | 66 | 66 | .17 | .20 | 4,058 |
| April | 67 | 47 | 59 | .15 | .17 | 3,512 |
| May | 49 | 37 | 43 | .11 | .13 | 2,644 |
| June | 53 | 47 | 50 | .13 | .15 | 2,975 |
| July | 41 | 38 | 40 | .10 | .12 | 2,460 |
| August | 48 | 33 | 40 | .10 | .12 | 2,460 |
| September | ........ | ........ | 44 | .11 | .12 | 2,618 |
| The year | 77 | 33 | 55.9 | .140 | 1.94 | 40,400 |
| **1902–3.** | | | | | | |
| October | 49 | 45 | 47 | .12 | .14 | 2,890 |
| November | 50 | 43 | 46 | .12 | .13 | 2,737 |
| December | 69 | 55 | 64 | .16 | .18 | 3,808 |
| January | 58 | 55 | 57 | .14 | .16 | 3,505 |
| February | 74 | 57 | 63 | .16 | .17 | 3,499 |
| March | 13,413 | 69 | 503 | 1.26 | 1.45 | 30,928 |
| April | 3,760 | 262 | 765 | 1.91 | 2.13 | 45,521 |
| May | 262 | 45 | 80 | .20 | .23 | 4,919 |
| June | 45 | 34 | 39 | .10 | .11 | 2,321 |
| July | 40 | 32 | 37 | .09 | .10 | 2,275 |
| August | 52 | 34 | 39 | .10 | .12 | 2,398 |
| September | 53 | 36 | 41 | .10 | .11 | 2,440 |
| The year | 13,413 | 32 | 148 | .370 | 5.03 | 107,000 |

[illegible]

ANTELOPE VALLEY.

**LITTLE ROCK CREEK NEAR PALMDALE, CAL.**

This station was located about 3 miles southeast of West Palmdale, at the headworks of the South Antelope Valley canal. The creek is diverted through a tunnel into a flume at the headworks, which at normal stage of the stream will carry all of the water. A [illegible] was placed in this flume, in which the discharge measurements were made at low stages. During high water measurements were made from the bridge, where the flume crosses the creek, one-half mile below the headworks, and a gage rod was placed there for this station. The flume is straight. The channel of the stream is [illegible] and the bed [illegible] widens. The banks are high, and the stream will not leave its present channel at the bridge.

These records were furnished by the South Antelope Valley Irrigation Co., through the courtesy of Burt Cole, chief engineer.

*Discharge measurements of Little Rock Creek near Palmdale, Cal., in 1896–1898.*

| Date. | Hydrographer. | Gage height. | Discharge. | Locality. |
|---|---|---|---|---|
| 1896. | | Feet. | Sec.-feet. | |
| Apr. 20 | J. A. Vogleson | 0.40 | 5.6 | In flume. |
| 20 | .....do | 10.33 | 7.2 | In creek above headworks. |
| June 2 | J. B. Lippincott | .17 | 1.0 | In flume. |
| 2 | .....do | 10.10 | 1.0 | In creek above headworks. |
| July 7 | Burt Cole | ........ | .3 | |
| 1897. | | | | |
| Feb. 9 | J. B. Lippincott | .56 | 20 | At long flume. |
| 9 | .....do | .91 | 21 | At headworks flume. |
| 9 | .....do | .34 | 21 | At long chute. |
| 9 | .....do | 2.00 | 126 | At box flume. |
| Mar. 7 | Burt Cole | 1.17 | 26 | |
| 7 | .....do | 2.00 | 69 | |
| Apr. 7 | J. B. Lippincott | 2.80 | 126 | |
| 16 | Burt Cole | .70 | 14 | |
| May 3 | .....do | 1.47 | 47 | |
| 15 | .....do | .45 | 7 | |
| 1898. | | | | |
| Jan. 5 | J. B. Lippincott | ........ | 3 | |
| Feb. 20 | Burt Cole | ........ | 5 | |

*Daily gage height, in feet, of Little Rock Creek near Palmdale, Cal., for 1897–98.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1897. | | | | | | | | 1897. | | | | | | | |
| 1 | 0.4 | 2.1 | 2.25 | 2.8 | 2.05 | 0.4 | 0.05 | 16 | 0.6 | 0.7 | 1.4 | 2.7 | 1.1 | 0.4 | ...... |
| 2 | .3 | 2.5 | 2.1 | 2.8 | 1.95 | .4 | .05 | 17 | .62 | .7 | 1.4 | 2.7 | 1.0 | .4 | ...... |
| 3 | .25 | 2.25 | 2.15 | 2.8 | 1.8 | .4 | .05 | 18 | .65 | 1.55 | 1.6 | 2.7 | .9 | .4 | ...... |
| 4 | .2 | 1.7 | 2.1 | 2.8 | 2.0 | .4 | .03 | 19 | .6 | 1.35 | 1.6 | 2.7 | .8 | .4 | ...... |
| 5 | .3 | 1.75 | 2.1 | 2.8 | 2.0 | .4 | .03 | 20 | .55 | 1.0 | 1.9 | 2.35 | .7 | .4 | ...... |
| 6 | .3 | 2.05 | 2.0 | 2.8 | 1.85 | .4 | .03 | 21 | .65 | 1.0 | 1.6 | 2.45 | .7 | .4 | ...... |
| 7 | .3 | 1.6 | 2.0 | 2.8 | 1.8 | .4 | .03 | 22 | .82 | 1.0 | 1.6 | 2.25 | .7 | .4 | ...... |
| 8 | .3 | 1.5 | 1.75 | 2.8 | 1.65 | .4 | .02 | 23 | .8 | .9 | 1.35 | 2.25 | .7 | .4 | ...... |
| 9 | .32 | 1.22 | 1.4 | 2.5 | 1.65 | .4 | .02 | 24 | .8 | .9 | 1.45 | 2.2 | .7 | .4 | ...... |
| 10 | .35 | 1.15 | 1.4 | 2.6 | 1.55 | .4 | ...... | 25 | .8 | 1.0 | 1.9 | 2.3 | .65 | .4 | ...... |
| 11 | .45 | 1.0 | 1.45 | 2.7 | 1.45 | .4 | ...... | 26 | .75 | 1.15 | 2.6 | 2.0 | .6 | .4 | ...... |
| 12 | .48 | .8 | 1.45 | 2.7 | 1.4 | .4 | ...... | 27 | .6 | 1.8 | 2.35 | 2.15 | .55 | .35 | ...... |
| 13 | .52 | .9 | 1.4 | 2.7 | 1.35 | .4 | ...... | 28 | .6 | 1.7 | 2.4 | 2.25 | .55 | .3 | ...... |
| 14 | .42 | .8 | 1.4 | 2.7 | 1.25 | .4 | ...... | 29 | .7 | ...... | 2.7 | 2.25 | .6 | .25 | ...... |
| 15 | .5 | .8 | 1.4 | 2.7 | 1.25 | .4 | ...... | 30 | 1.1 | ...... | 2.8 | 2.2 | .55 | .15 | ...... |
| | | | | | | | | 31 | 1.35 | ...... | 2.8 | ...... | .45 | ...... | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1897–98. | | | | | | | | | |
| 1 | ........ | 0.4 | 0.35 | 0.35 | 0.4 | 0.38 | 0.42 | 0.31 | 0.20 |
| 2 | ........ | .4 | .3 | .35 | .4 | .38 | .42 | .27 | .10 |
| 3 | 0.05 | .4 | .3 | .35 | .4 | .38 | .45 | .27 | ........ |
| 4 | .1 | .4 | .3 | .35 | .4 | .38 | .45 | .25 | ........ |
| 5 | .1 | .4 | .3 | .35 | .4 | .38 | .45 | .26 | ........ |
| 6 | .15 | .4 | .3 | .35 | .4 | .38 | .45 | .35 | ........ |
| 7 | .2 | .4 | .3 | .35 | .5 | .38 | .45 | .33 | ........ |
| 8 | .2 | .4 | .3 | .4 | .85 | .38 | .43 | .32 | ........ |
| 9 | .25 | .4 | .35 | .4 | .61 | .38 | .41 | .32 | ........ |
| 10 | .3 | .4 | .35 | .4 | .5 | .4 | .4 | .28 | ........ |
| 11 | .4 | .4 | .35 | .4 | .48 | .42 | .4 | .26 | ........ |
| 12 | .4 | .4 | .35 | .4 | .45 | .4 | .4 | .24 | ........ |
| 13 | .4 | .4 | .35 | .4 | .42 | .38 | .4 | .22 | ........ |
| 14 | .4 | .4 | .35 | .4 | .41 | .39 | .4 | .22 | ........ |
| 15 | .4 | .4 | .35 | .5 | .41 | .39 | .39 | .24 | ........ |
| 16 | .4 | .4 | .35 | .4 | .41 | .39 | .39 | .72 | ........ |
| 17 | .4 | .4 | .35 | .4 | .4 | .39 | .39 | .56 | ........ |
| 18 | .4 | .4 | .35 | .4 | .4 | .38 | .38 | .53 | ........ |
| 19 | .4 | .4 | .35 | .4 | .4 | .39 | .38 | .48 | ........ |
| 20 | .4 | .4 | .35 | .4 | .4 | .4 | .37 | .47 | ........ |

[illegible]

[illegible]

| | | | | |
|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

| | | | | | |
|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

| | | | | | | |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Total | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Monthly discharge of Little Rock Creek near Palmdale, Cal., for 1896–1899*—Continued.

| Month. | Discharge in second-feet. | | | | Depth in inches on drainage area. | Total in acre-feet. |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | | |
| **1897-98.** | | | | | | |
| October | 7 | 0.2 | 5.5 | 0.071 | 0.08 | 338 |
| November | 8 | 6 | 6.9 | .088 | .10 | 411 |
| December | 6 | 5 | 5.7 | .073 | .08 | 350 |
| January | 12.1 | 5.5 | 6.06 | .08 | .09 | 373 |
| February | 20.0 | 5 | 7.00 | .09 | .09 | 389 |
| March | 6.4 | 5.8 | 6.04 | .08 | .09 | 371 |
| April | 7.4 | 3.7 | 6.10 | .08 | .09 | 364 |
| May | 19.2 | 1.9 | 5.20 | .07 | .08 | 319 |
| June | 0 | 0 | 0 | 0 | 0 | 0 |
| July | 0 | 0 | 0 | 0 | 0 | 0 |
| August | 10 | 0 | .4 | 0 | 0 | 10 |
| September | 0 | 0 | 0 | 0 | 0 | 0 |
| The year | 20 | 0 | 4.04 | .052 | .70 | 2,930 |
| **1898-99.** | | | | | | |
| October | 0 | 0 | 0 | 0 | 0 | 0 |
| November | 0 | 0 | 0 | 0 | 0 | 0 |
| December | 0 | 0 | 0 | 0 | 0 | 0 |
| January | 7 | 0.0 | 4.90 | 0.062 | 0.08 | 318 |
| February | 5 | 3 | 4.41 | .056 | .06 | 245 |
| March | 16.5 | 4 | 7.66 | .098 | .11 | 472 |
| April | 6 | 2 | 4.50 | .058 | .06 | 268 |
| May | 2 | 1 | 1.50 | .019 | .02 | 166 |
| June | 3 | .2 | 2.00 | .026 | .03 | 119 |
| July | .2 | .2 | .20 | .003 | .003 | 12 |
| August | .2 | .2 | .20 | .003 | .003 | 12 |
| September | .2 | .2 | .20 | .003 | .003 | 12 |
| The year | 16.5 | 0 | 2.13 | .027 | .37 | 1,020 |
| **1899.** | | | | | | |
| October | 0 | 0 | 0 | 0 | 0 | 0 |
| November | 0 | 0 | 0 | 0 | 0 | 0 |
| December | 4 | 0 | 1 | .013 | .01 | 61 |

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made on streams flowing into Mohave Desert:

*Miscellaneous measurements of streams that discharge into the Mohave Desert.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| Jan. 4, 1898 | Big Rock Creek | Dam site above development tunnel | 5.27 |
| Do | do | Diversion to tunnel | 1.27 |
| Do | do | Developed in tunnel | 1.33 |
| Do | do | Cienaga on Pallett tributary | .78 |
| Oct. 13, 1906 | Little Rock Creek | 3 miles above Little Rock | 1.1 |
| Oct. 14, 1906 | Rock Creek | 1½ miles above Shoemaker | 6.5 |
| Do | do | Road crossing below junction of Pallet Creek | 9.4 |
| Do | Pallett Creek | Above junction with Rock Creek | 1.8 |

## SALTON SINK.

### SALTON SEA NEAR SALTON, CAL.

During the high water of the summer of 1891 the Colorado overflowed into Salton Sink to such an extent as to endanger the Southern Pacific Railroad at its lowest point. In the summer of 1905, after a succession of winter and spring floods in Gila River followed by an

[illegible] the flood into the [illegible] was repeated on a much larger scale. The old river channel [illegible] Alamo River was transformed into a deep wide gorge, and [illegible] channel, now called New River, was formed. The flood did [illegible] damage to the tracks of the Southern Pacific Railroad, to the [illegible] of the New Liverpool Salt Co. [illegible] Mexico, and to the ranches [illegible]

[illegible] records kept by the New Liverpool Salt Co. from [illegible] 4, to February [illegible] 1906, show the actual depth of the [illegible] above the lowest portion of the sink. February 23, 1906, the [illegible] installed a gage at the same datum, about half a mile [illegible] railroad station and [illegible] miles southeast of the old Salton station. This gage was destroyed by waves. The Southern Pacific [illegible] maintained a gage on trestle bent across Salt Creek about [illegible] miles east [illegible] using the company's datum; the zero of this gage is [illegible] feet below mean sea level as determined from United States Geological Survey bench marks, or at an elevation of [illegible] feet below sea level [illegible] the Southern Pacific Co.

[illegible] all the water received by Salton Sea enters through Alamo and New rivers, but chiefly through the former. These rivers run through Imperial Valley and are the drainage channels for the excess and waste water from the irrigation system and from the lower [illegible].

*Daily gage height, in feet, of Salton Sea near Salton, Cal., for [illegible]–1911.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 13.3 | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | [illegible] | [illegible] | [illegible] | [illegible] | 14.6 | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | 4.5 | [illegible] | 6.5 | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | 4.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | 4.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | 4.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | 4.6 | [illegible] | 6.6 | 8.5 | 12.8 | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 13.0 | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | 9.0 | [illegible] | [illegible] | [illegible] |
| 31 | | [illegible] | 2.2 | | [illegible] | | [illegible] | ........ | 13.4 | [illegible] | |

*Daily gage height, in feet, of Salton Sea near Salton, Cal., for 1905-1907*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1905-6.** | | | | | | | | | | | | |
| 1 | 16.8 | 18.3 | 19.3 | 22.8 | 23.9 | | 28.3 | 34.1 | 42.7 | 59.1 | 66.7 | 69.5 |
| 2 | 16.9 | 18.3 | 19.6 | 22.8 | 24.0 | 25.6 | | | 43.3 | 59.6 | 66.9 | 69.5 |
| 3 | 16.9 | 18.4 | 19.9 | 22.8 | 24.0 | | 28.7 | 34.4 | 43.8 | 60.1 | 67.0 | 69.6 |
| 4 | 17.0 | 18.5 | 19.9 | 22.8 | 24.2 | | | 34.5 | 44.4 | 60.5 | 67.0 | 69.6 |
| 5 | 17.0 | 18.5 | 20.0 | 22.9 | 24.2 | 25.8 | 29.1 | | 44.7 | 60.5 | 67.1 | 69.7 |
| 6 | 17.1 | 18.6 | 20.1 | 22.9 | 24.3 | | | | | 61.0 | 67.2 | 69.8 |
| 7 | 17.1 | 18.7 | 20.2 | 23.0 | 24.4 | 25.9 | 29.5 | | | 61.4 | 67.3 | 69.9 |
| 8 | 17.1 | 18.8 | 20.3 | 23.0 | 24.4 | 26.0 | 29.7 | | | 61.7 | 67.4 | 69.9 |
| 9 | 17.1 | 18.8 | 20.5 | 23.0 | 24.5 | | | | | 62.1 | 67.5 | 69.9 |
| 10 | 17.2 | 18.8 | 20.7 | 23.1 | 24.5 | 26.0 | 30.2 | | 47.9 | 62.5 | 67.6 | 69.9 |
| 11 | 17.2 | 18.8 | 20.8 | 23.2 | 24.7 | | | | 48.4 | 62.6 | 67.7 | 69.9 |
| 12 | 17.2 | 18.9 | 21.0 | 23.2 | 24.8 | 26.0 | 30.5 | 36.4 | 48.6 | 62.8 | 67.8 | 70.0 |
| 13 | 17.2 | 19.0 | 21.2 | 23.2 | 24.8 | 26.2 | 30.9 | | 49.5 | 63.3 | 67.9 | 70.0 |
| 14 | 17.2 | 19.0 | 21.3 | 23.2 | 24.9 | | 31.1 | 36.9 | 50.0 | 63.3 | 68.1 | 70.0 |
| 15 | 17.3 | 19.1 | 21.5 | 23.3 | 25.0 | | 31.3 | 37.2 | | 63.5 | 68.2 | 70.1 |
| 16 | 17.3 | 19.2 | 21.7 | 23.3 | 25.0 | | | | 51.3 | 63.8 | 68.3 | 70.1 |
| 17 | 17.4 | 19.2 | 21.8 | 23.3 | 25.1 | 26.3 | 31.7 | 37.5 | | 64.1 | 68.4 | 70.1 |
| 18 | 17.5 | 19.2 | 21.9 | 23.3 | 25.1 | 26.4 | | 37.8 | 52.3 | 64.3 | 68.5 | 70.1 |
| 19 | 17.6 | 19.2 | 22.0 | 23.4 | 25.2 | 26.4 | 32.0 | 38.0 | | 64.4 | 68.6 | 70.1 |
| 20 | 17.7 | 19.3 | 22.1 | 23.4 | 25.2 | | 32.2 | 38.4 | 52.8 | 64.6 | 68.7 | 70.1 |
| 21 | 17.8 | 19.3 | 22.2 | 23.4 | 25.2 | 26.5 | 32.3 | | | 64.8 | 68.8 | 70.1 |
| 22 | 17.8 | 19.4 | 22.2 | 23.5 | 25.3 | | | 38.9 | | 65.0 | 68.9 | 70.1 |
| 23 | 17.9 | 19.4 | 22.3 | 23.6 | 25.4 | 26.8 | | | | 65.3 | 69.0 | 70.1 |
| 24 | 17.9 | 19.5 | 22.3 | 23.5 | 25.5 | 27.0 | | 39.5 | | 65.3 | 69.0 | 70.1 |
| 25 | 18.0 | 19.5 | 22.4 | 23.6 | 25.6 | 27.1 | 33.0 | 39.8 | 55.3 | 65.5 | 69.1 | 70.1 |
| 26 | 18.0 | 19.6 | 22.4 | 23.6 | 25.7 | | | 40.0 | 55.7 | 65.7 | 69.2 | 70.2 |
| 27 | 18.1 | 19.7 | 22.5 | 23.6 | | 27.6 | 33.3 | 40.7 | 56.2 | 65.9 | 69.3 | 70.2 |
| 28 | 18.2 | 19.7 | 22.6 | 23.7 | | 27.7 | | 41.3 | 56.7 | 66.1 | 69.4 | 70.2 |
| 29 | 18.2 | 19.8 | 22.6 | 23.7 | | | 33.6 | 41.5 | 57.3 | 66.2 | 69.4 | 70.2 |
| 30 | 18.2 | 19.8 | 22.7 | 23.8 | | 28.2 | | 41.8 | 57.9 | 66.3 | 69.4 | 70.3 |
| 31 | 18.2 | | 22.7 | 23.8 | | | | 42.5 | | 66.5 | 69.4 | |
| **1906-7.** | | | | | | | | | | | | |
| 1 | 70.3 | 71.5 | 71.3 | 72.6 | 75.4 | 76.0 | 75.9 | | 75.1 | 74.7 | 74.5 | 74.2 |
| 2 | 70.3 | 71.5 | 71.3 | 72.7 | 75.5 | 76.0 | 75.9 | | 75.1 | 74.7 | 74.5 | 74.2 |
| 3 | 70.3 | 71.5 | 71.2 | 72.8 | 75.6 | 76.0 | 75.9 | | 75.1 | 74.6 | 74.5 | 74.2 |
| 4 | 70.4 | 71.5 | 71.2 | 72.9 | 75.6 | 76.0 | 75.9 | | 75.1 | 74.6 | 74.5 | 74.2 |
| 5 | 70.4 | 71.6 | 71.2 | 72.9 | 75.7 | 76.0 | 75.9 | | 75.1 | 74.6 | 74.5 | 74.1 |
| 6 | 70.4 | 71.6 | 71.2 | 73.0 | 75.7 | 76.0 | 75.9 | | 75.1 | 74.6 | 74.5 | 74.1 |
| 7 | 70.4 | 71.6 | 71.2 | 73.0 | 75.8 | 76.0 | 75.9 | | 75.1 | 74.6 | 74.5 | 74.0 |
| 8 | 70.6 | 71.6 | 71.2 | 73.1 | | 76.0 | 75.9 | | 75.1 | 74.6 | 74.4 | 73.9 |
| 9 | 70.6 | 71.6 | 71.2 | 73.1 | | 76.0 | 75.9 | | 75.1 | 74.6 | 74.4 | 73.9 |
| 10 | 70.8 | 71.6 | 71.2 | 73.2 | 76.0 | 76.0 | 75.9 | | 75.0 | 74.6 | 74.4 | 73.8 |
| 11 | 70.9 | 71.6 | 71.2 | 73.4 | 76.0 | 76.0 | 75.9 | | 75.0 | 74.6 | 74.4 | 73.8 |
| 12 | 71.1 | 71.6 | 71.2 | 73.5 | 76.0 | 76.0 | 75.9 | | 75.0 | 74.6 | 74.4 | 73.8 |
| 13 | 71.3 | 71.6 | 71.4 | 73.6 | 76.0 | 76.0 | 75.8 | | 75.0 | 74.6 | 74.4 | 73.8 |
| 14 | 71.3 | 71.6 | 71.4 | 73.7 | 76.0 | 76.0 | 75.7 | | 75.0 | 74.6 | 74.4 | 73.8 |
| 15 | 71.3 | 71.6 | 71.5 | 73.8 | 76.0 | 76.0 | 75.7 | 75.4 | 75.0 | 74.6 | 74.4 | 73.8 |
| 16 | 71.3 | 71.5 | 71.5 | 73.9 | 76.0 | 76.0 | 75.7 | 75.4 | 75.0 | 74.6 | 74.4 | 73.7 |
| 17 | 71.3 | 71.5 | 71.5 | 74.0 | 76.0 | 76.0 | 75.7 | 75.4 | 75.0 | 74.6 | 74.4 | 73.7 |
| 18 | 71.3 | 71.5 | 71.6 | 74.1 | 76.0 | 76.0 | | 75.3 | 74.9 | 74.6 | 74.4 | 73.7 |
| 19 | 71.3 | 71.5 | 71.7 | 74.2 | 76.0 | 76.0 | | 75.2 | 74.9 | 74.6 | 74.3 | 73.6 |
| 20 | 71.3 | 71.5 | 71.8 | 74.3 | 76.0 | 76.0 | | 75.2 | 74.9 | 74.6 | 74.3 | 73.6 |
| 21 | 71.4 | 71.5 | 71.8 | | 76.0 | 76.0 | | 75.2 | 74.9 | 74.6 | 74.3 | 73.6 |
| 22 | 71.4 | 71.5 | 71.9 | | 76.0 | 76.0 | | 75.2 | 74.9 | 74.6 | 74.3 | 73.6 |
| 23 | 71.4 | 71.5 | 72.0 | | 76.0 | 76.0 | | 75.1 | 74.9 | 74.6 | 74.3 | 73.6 |
| 24 | 71.4 | 71.5 | 72.1 | | 76.0 | 76.0 | | 75.1 | 74.8 | 74.6 | 74.3 | 73.6 |
| 25 | 71.4 | 71.4 | 72.2 | 74.9 | 76.0 | 76.0 | | 75.1 | 74.8 | 74.6 | 74.3 | 73.5 |
| 26 | 71.4 | 71.4 | 72.3 | 75.0 | 76.0 | 76.0 | | 75.1 | 74.8 | 74.6 | 74.3 | 73.5 |
| 27 | 71.4 | 71.4 | 72.3 | 75.2 | 76.0 | 76.0 | | 75.1 | 74.7 | 74.6 | 74.3 | 73.5 |
| 28 | 71.5 | 71.4 | 72.3 | 75.3 | 76.0 | 76.0 | | 75.1 | 74.7 | 74.5 | 74.2 | 73.5 |
| 29 | 71.5 | 71.3 | 72.4 | 75.3 | | 76.0 | | 75.1 | 74.7 | 74.5 | 74.2 | 73.5 |
| 30 | 71.5 | 71.3 | 72.4 | 75.3 | | 75.9 | | 75.1 | 74.7 | 74.5 | 74.2 | 73.5 |
| 31 | 71.5 | | 72.5 | 75.3 | | 75.9 | | 75.1 | | 74.5 | | |

[illegible]

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | 72.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | 72.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | 72.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | 72.4 | [illegible] | 72.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | 72.4 | 72.4 | 72.3 | 72.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | 72.4 | [illegible] | 72.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | 72.7 | 72.4 | [illegible] | 72.2 | 72.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | 72.7 | 72.4 | [illegible] | 72.2 | 72.1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | 72.7 | 72.4 | 72.3 | 72.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | 72.7 | 72.4 | 72.3 | 72.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | 73.2 | 72.7 | 72.4 | [illegible] | 72.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | 72.3 | [illegible] | 72.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | 72.3 | 72.3 | 72.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 73.2 | 72.8 | 72.3 | 72.3 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | 72.8 | 72.3 | 72.3 | ...... | 72.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | | 72.3 | 72.3 | ...... | 72.0 | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... |
| 1908. | | | | | | | | | | | | |
| 1 | 68.6 | 67.9 | 67.6 | 67.45 | 67.4 | 67.25 | 67.0 | 66.7 | 66.25 | 65.9 | 65.3 | 65.35 |
| 2 | 68.6 | 67.9 | 67.6 | 67.45 | 67.4 | 67.25 | 67.0 | 66.7 | 66.25 | 65.95 | 65.25 | 65.3 |
| 3 | 68.5 | 67.9 | 67.6 | 67.45 | 67.4 | 67.25 | 67.0 | 66.7 | 66.25 | 65.95 | 65.2 | 65.25 |
| 4 | 68.5 | 67.9 | 67.6 | 67.45 | 67.4 | 67.25 | 67.0 | 66.7 | 66.2 | 65.9 | 65.2 | 65.3 |
| 5 | 68.5 | 67.9 | 67.6 | 67.45 | 67.4 | 67.2 | 66.95 | 66.7 | 66.2 | 65.9 | 65.2 | 65.25 |
| 6 | 68.5 | 67.9 | 67.6 | 67.45 | 67.4 | 67.2 | 66.95 | 66.7 | 66.15 | 65.75 | 65.15 | 65.25 |
| 7 | 68.5 | 67.9 | 67.6 | 67.4 | 67.35 | 67.2 | 66.95 | 66.7 | 66.1 | 65.75 | 65.35 | 65.3 |
| 8 | 68.4 | 67.9 | 67.6 | 67.4 | 67.35 | 67.2 | 66.95 | 66.7 | 66.1 | 65.75 | 65.3 | 65.25 |
| 9 | 68.4 | 67.8 | 67.5 | 66.4 | 67.35 | 67.2 | 66.95 | 66.65 | 66.15 | 65.7 | 65.3 | 65.25 |
| 10 | 68.4 | 67.8 | 67.5 | 67.4 | 67.3 | 67.15 | 66.95 | 66.65 | 66.15 | 65.7 | 65.25 | 65.25 |
| 11 | 68.4 | 67.9 | 67.5 | 67.45 | 67.3 | 67.15 | 66.9 | 66.65 | 66.15 | 65.7 | 65.25 | 65.2 |
| 12 | 68.4 | 67.9 | 67.5 | 67.45 | 67.3 | 67.15 | 66.9 | 66.65 | 66.15 | 65.7 | 65.25 | 65.15 |
| 13 | 68.4 | 67.8 | 67.5 | 67.45 | 67.3 | 67.1 | 66.9 | 66.65 | 66.15 | 65.65 | 65.2 | 65.1 |
| 14 | 68.4 | 67.8 | 67.5 | 67.45 | 67.3 | 67.1 | 66.9 | 66.65 | 66.1 | 65.65 | 65.2 | 65.05 |
| 15 | 68.3 | 67.8 | 67.5 | 67.45 | 67.3 | 67.1 | 66.9 | 66.65 | 66.1 | 65.65 | 65.2 | 65.05 |
| 16 | 68.3 | 67.8 | 67.5 | 67.45 | 67.3 | 67.1 | 66.9 | 66.6 | 66.1 | 65.65 | 65.25 | 65.05 |
| 17 | 68.3 | 67.8 | 67.5 | 67.45 | 67.3 | 67.1 | 66.9 | 66.6 | 66.05 | 65.6 | 65.15 | 65.0 |
| 18 | 68.2 | 67.8 | 67.4 | 67.45 | 67.3 | 67.1 | 66.85 | 66.6 | 66.05 | 65.55 | 65.2 | 65.0 |
| 19 | 68.2 | 67.8 | 67.4 | 67.45 | 67.3 | 67.05 | 66.85 | 66.6 | 66.0 | 65.55 | 65.2 | 65.0 |
| 20 | 68.1 | 67.8 | 67.4 | 67.45 | 67.3 | 67.05 | 66.85 | 66.6 | 66.0 | 65.55 | 65.15 | 64.95 |
| 21 | 68.1 | 67.8 | 67.4 | 67.45 | 67.3 | 67.05 | 66.8 | 66.6 | 66.0 | 65.55 | 65.2 | 64.9 |
| 22 | 68.1 | 67.8 | 67.4 | 67.4 | 67.3 | 67.05 | 66.8 | 66.6 | 66.0 | 65.55 | 65.15 | 64.9 |
| 23 | 68.1 | 67.8 | 67.4 | 67.4 | 67.3 | 67.05 | 66.8 | 66.55 | 66.0 | 65.55 | 65.15 | 64.9 |
| 24 | 68.0 | 67.7 | 67.4 | 67.4 | 67.3 | 67.05 | 66.8 | 66.55 | 65.95 | 65.5 | 65.15 | 64.9 |
| 25 | 68.0 | 67.7 | 67.4 | 67.4 | 67.3 | 67.05 | 66.8 | 66.5 | 65.95 | 65.45 | 65.15 | 64.85 |
| 26 | 68.0 | 67.7 | 67.4 | 67.4 | 67.25 | 67.05 | 66.75 | 66.45 | 65.95 | 65.45 | 65.1 | 64.85 |
| 27 | 68.0 | 67.6 | 67.4 | 67.4 | 67.25 | 67.05 | 66.75 | 66.45 | 65.95 | 65.4 | 65.1 | 64.8 |
| 28 | 68.0 | 67.6 | 67.4 | 67.4 | 67.25 | 67.05 | 66.75 | 66.4 | 65.95 | 65.35 | 65.1 | 64.8 |
| 29 | 67.9 | 67.6 | 67.4 | 67.4 | ....... | 67.05 | 66.75 | 66.35 | 65.9 | 65.35 | 65.1 | 64.75 |
| 30 | 67.9 | 67.6 | 67.4 | 67.4 | ....... | 67.0 | 66.7 | 66.3 | 65.9 | 65.35 | 65.15 | 64.75 |
| 31 | 67.9 | ....... | 67.4 | 67.4 | ....... | 67.0 | ....... | 66.3 | ....... | 65.3 | 65.25 | ...... |

*Daily gage height, in feet, of Salton Sea near Salton, Cal., for 1904–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | 64.7 | 64.1 | 63.65 | 63.4 | 63.4 | 63.2 | 62.95 | 62.65 | 62.15 | 61.5 | 61.05 | 60.4 |
| 2 | 64.65 | 64.1 | 63.65 | 63.4 | 63.4 | 63.2 | 62.95 | 62.65 | 62.15 | 61.5 | 61.05 | 60.4 |
| 3 | 64.6 | 64.1 | 63.65 | 63.4 | 63.4 | 63.2 | 62.95 | 62.65 | 62.1 | 61.45 | 61.05 | 60.35 |
| 4 | 64.6 | 64.05 | 63.65 | 63.45 | 63.35 | 63.2 | 62.95 | 62.6 | 62.1 | 61.45 | 61.0 | 60.3 |
| 5 | 64.55 | 64.05 | 63.6 | 63.4 | 63.35 | 63.2 | 62.9 | 62.55 | 62.1 | 61.45 | 61.0 | 60.25 |
| 6 | 64.55 | 64.05 | 63.6 | 63.4 | 63.3 | 63.2 | 62.95 | 62.55 | 62.1 | 61.4 | 60.95 | 60.2 |
| 7 | 64.5 | 64.05 | 63.55 | 63.4 | 63.3 | 63.2 | 62.85 | 62.5 | 62.05 | 61.4 | 60.95 | 60.15 |
| 8 | 64.5 | 64.0 | 63.55 | 63.4 | 63.3 | 63.2 | 62.9 | 62.5 | 62.05 | 61.35 | 60.9 | 60.05 |
| 9 | 64.5 | 64.0 | 63.6 | 63.4 | 63.3 | 63.15 | 62.9 | 62.55 | 62.05 | 61.35 | 60.85 | 60.0 |
| 10 | 64.45 | 63.95 | 63.55 | 63.4 | 63.3 | 63.15 | 62.9 | 62.5 | 62.05 | 61.35 | 60.85 | 59.95 |
| 11 | 64.45 | 63.95 | 63.55 | 63.4 | 63.3 | 63.15 | 62.85 | 62.45 | 62.0 | 61.35 | 60.8 | 59.9 |
| 12 | 64.45 | 63.9 | 63.55 | 63.4 | 63.3 | 63.1 | 62.8 | 62.45 | 61.95 | 61.3 | 60.85 | 59.9 |
| 13 | 64.4 | 63.9 | 63.55 | 63.4 | 63.3 | 63.15 | 62.85 | 62.45 | 61.95 | 61.3 | 60.8 | 59.9 |
| 14 | 64.4 | 63.9 | 63.55 | 63.4 | 63.3 | 63.1 | 62.85 | 62.45 | 61.9 | 61.25 | 60.7 | 59.85 |
| 15 | 64.4 | 63.85 | 63.55 | 63.4 | 63.3 | 63.15 | 62.85 | 62.4 | 61.8 | 61.25 | 60.7 | 59.85 |
| 16 | 64.35 | 63.8 | 63.5 | 63.4 | 63.25 | 63.1 | 62.8 | 62.35 | 61.75 | 61.25 | 60.7 | 59.8 |
| 17 | 64.35 | 63.8 | 65.5 | 63.4 | 63.25 | 63.1 | 62.8 | 62.35 | 61.75 | 61.25 | 60.65 | 59.8 |
| 18 | 64.3 | 63.75 | 63.5 | 63.4 | 63.25 | 63.1 | 62.8 | 62.35 | 61.75 | 61.2 | 60.6 | 59.8 |
| 19 | 64.3 | 63.75 | 63.5 | 63.4 | 63.25 | 63.1 | 62.8 | 62.35 | 61.75 | 61.25 | 60.55 | 59.8 |
| 20 | 64.3 | 63.75 | 63.5 | 63.4 | 63.25 | 63.1 | 62.8 | 62.35 | 61.75 | 61.25 | 60.55 | 59.8 |
| 21 | 64.3 | 63.75 | 63.45 | 63.4 | 63.25 | 63.1 | 62.8 | 62.25 | 61.75 | 61.25 | 60.55 | 59.75 |
| 22 | 64.25 | 63.7 | 63.45 | 63.4 | 63.25 | 63.1 | 62.75 | 62.25 | 61.7 | 61.2 | 60.5 | 59.75 |
| 23 | 64.25 | 63.7 | 63.45 | 63.4 | 63.25 | 63.1 | 62.75 | 62.25 | 61.65 | 61.25 | 60.5 | 59.75 |
| 24 | 64.25 | 63.75 | 63.45 | 63.4 | 63.15 | 63.1 | 62.75 | 62.25 | 61.6 | 61.2 | 60.5 | 59.75 |
| 25 | 64.25 | 63.75 | 63.4 | 63.4 | 63.15 | 63.1 | 62.75 | 62.25 | 61.65 | 61.15 | 60.45 | 59.75 |
| 26 | 64.2 | 63.75 | 63.4 | 63.4 | 63.2 | 63.05 | 62.75 | 62.25 | 61.55 | 61.15 | 60.45 | 59.75 |
| 27 | 64.2 | 63.7 | 63.4 | 63.4 | 63.25 | 63.05 | 62.7 | 62.25 | 61.55 | 61.15 | 60.45 | 59.75 |
| 28 | 64.2 | 63.7 | 63.4 | 63.4 | 63.2 | 63.05 | 62.7 | 62.2 | 61.55 | 61.1 | 60.45 | 59.7 |
| 29 | 64.2 | 63.7 | 63.4 | 63.4 | ....... | 63.05 | 62.7 | 62.2 | 61.55 | 61.1 | 60.4 | 59.7 |
| 30 | 64.2 | 63.65 | 63.4 | 63.4 | ....... | 62.95 | 62.65 | 62.2 | 61.5 | 61.05 | 60.4 | 59.7 |
| 31 | 64.2 | ....... | 63.4 | 63.4 | ....... | 62.95 | ....... | 62.15 | ....... | 61.05 | 60.4 | ...... |
| 1910-11. | | | | | | | | | | | | |
| 1 | 59.7 | 59.15 | 58.85 | 58.44 | 58.23 | 58.14 | 58.01 | 57.61 | 57.10 | 56.50 | 56.23 | 55.81 |
| 2 | 59.65 | 59.15 | 58.8 | 58.44 | 58.23 | 58.14 | 58.00 | 57.60 | 57.08 | 56.49 | 56.21 | 55.82 |
| 3 | 59.65 | 59.15 | 58.8 | 58.43 | 58.25 | 58.13 | 57.99 | 57.59 | 57.05 | 56.47 | 56.20 | 55.80 |
| 4 | 59.6 | 59.1 | 58.8 | 58.42 | 58.30 | 58.13 | 57.98 | 57.57 | 57.03 | 56.46 | 56.19 | 55.79 |
| 5 | 59.6 | 59.1 | 58.8 | 58.41 | 58.29 | 58.12 | 57.97 | 57.55 | 57.00 | 56.44 | 56.17 | 55.78 |
| 6 | 59.6 | 59.1 | 58.75 | 58.40 | 58.28 | 58.12 | 57.96 | 57.54 | 56.98 | 56.43 | 56.15 | 55.77 |
| 7 | 59.55 | 59.1 | 58.75 | 58.39 | 58.26 | 58.12 | 57.96 | 57.53 | 56.96 | 56.42 | 56.14 | 55.76 |
| 8 | 59.55 | 59.05 | 58.75 | 58.39 | 58.25 | 58.11 | 57.95 | 57.52 | 56.95 | 56.41 | 56.12 | 55.74 |
| 9 | 59.5 | 59.05 | 58.7 | 58.38 | 58.23 | 58.11 | 57.94 | 57.51 | 56.92 | 56.40 | 56.10 | 55.71 |
| 10 | 59.5 | 59.05 | 58.7 | 58.38 | 58.23 | 58.10 | 57.93 | 57.51 | 56.90 | 56.39 | 56.08 | 55.70 |
| 11 | 59.5 | 59.0 | 58.7 | 58.38 | 58.23 | 58.10 | 57.92 | 57.49 | 56.89 | 56.38 | 56.06 | 55.66 |
| 12 | 59.45 | 59.0 | 58.7 | 58.37 | 58.23 | 58.10 | 57.90 | 57.48 | 56.87 | 56.37 | 56.05 | 55.64 |
| 13 | 59.45 | 59.0 | 58.7 | 58.37 | 58.23 | 58.10 | 57.88 | 57.47 | 56.86 | 56.35 | 56.03 | 55.61 |
| 14 | 59.45 | 59.0 | 58.7 | 58.36 | 58.22 | 58.09 | 57.87 | 57.45 | 56.85 | 56.34 | 56.01 | 55.58 |
| 15 | 59.4 | 59.0 | 58.65 | 58.34 | 58.22 | 58.09 | 57.85 | 57.43 | 56.84 | 56.33 | 55.99 | 55.54 |
| 16 | 59.4 | 59.0 | 58.65 | 58.33 | 58.22 | 58.09 | 57.85 | 57.40 | 56.82 | 56.31 | 55.97 | 55.52 |
| 17 | 59.35 | 59.0 | 58.65 | 58.31 | 58.22 | 58.08 | 57.84 | 57.38 | 56.80 | 56.30 | 55.95 | 55.51 |
| 18 | 59.35 | 59.0 | 58.65 | 58.30 | 58.22 | 58.08 | 57.83 | 57.35 | 56.78 | 56.29 | 55.93 | 55.50 |
| 19 | 59.3 | 58.95 | 58.65 | 58.29 | 58.21 | 58.08 | 57.82 | 57.33 | 56.76 | 56.28 | 55.91 | 55.48 |
| 20 | 59.3 | 58.95 | 58.65 | 58.28 | 58.20 | 58.07 | 57.82 | 57.30 | 56.75 | 56.28 | 55.90 | 55.47 |
| 21 | 59.3 | 58.95 | 58.6 | 58.26 | 58.20 | 58.07 | 57.81 | 57.29 | 56.73 | 56.30 | 55.89 | 55.45 |
| 22 | 59.25 | 58.95 | 58.6 | 58.26 | 58.19 | 58.06 | 57.80 | 57.27 | 56.71 | 56.32 | 55.88 | 55.43 |
| 23 | 59.25 | 58.95 | 58.6 | 58.26 | 58.18 | 58.06 | 57.78 | 57.25 | 56.69 | 56.32 | 55.88 | 55.40 |
| 24 | 59.25 | 58.9 | 58.55 | 58.25 | 58.17 | 58.05 | 57.75 | 57.24 | 56.67 | 56.32 | 55.88 | 55.38 |
| 25 | 59.25 | 58.9 | 58.55 | 58.25 | 58.17 | 58.05 | 57.73 | 57.22 | 56.65 | 56.31 | 55.88 | 55.36 |
| 26 | 59.2 | 58.9 | 58.55 | 58.25 | 58.16 | 58.05 | 57.70 | 57.21 | 56.62 | 56.30 | 55.88 | 55.32 |
| 27 | 59.2 | 58.9 | 58.5 | 58.24 | 58.15 | 58.04 | 57.67 | 57.19 | 56.60 | 56.29 | 55.87 | 55.30 |
| 28 | 59.2 | 58.9 | 58.5 | 58.24 | 58.15 | 58.04 | 57.65 | 57.17 | 56.58 | 56.28 | 55.86 | 55.27 |
| 29 | 59.2 | 58.85 | 58.5 | 58.24 | ....... | 58.03 | 57.63 | 57.15 | 56.55 | 56.27 | 55.85 | 55.25 |
| 30 | 59.2 | 58.85 | 58.45 | 58.24 | ....... | 58.03 | 57.62 | 57.13 | 56.52 | 56.26 | 55.84 | 55.22 |
| 31 | 59.15 | ....... | 58.45 | 58.23 | ....... | 58.02 | ....... | 57.12 | ....... | 56.24 | 55.83 | ...... |

[illegible]—Continued.

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | 11. | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

| Month. | [illegible] | [illegible] | Month. | [illegible] | [illegible] | Month. | Monthly rise. | Total [illegible] |
|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1909. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | September | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | November | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | December | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1910. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | January | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | February | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | March | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | April | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | May | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | June | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | July | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | August | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | September | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | October | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | November | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | December | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1911. | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | January | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | February | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | March | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | April | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | May | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | June | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | July | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | August | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | September | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | October | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | November | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | December | [illegible] | [illegible] |

## ALAMO RIVER NEAR BRAWLEY, CAL.

During 1908 discharge measurements were made on Alamo River at a highway bridge [illegible] miles east of Brawley, Cal., by H. R. Edwards, engineer for the New Liverpool Salt Co. During 1909 measurements were made by engineers of the United States Geological Survey. On June 24, 1909, a continuous record of gage heights was commenced at this point. The staff gage is spiked vertically to a pile on the left abutment of the bridge. The datum of the gage has remained the same during the maintenance of the station. All discharge measurements are made from the bridge.

The data obtained at this station, together with those obtained on New River, show the amount of waste water reaching Salton Sea and are of value in connection with experiments being made by the United States Weather Bureau for determining the evaporation from Salton Sea.

Conditions for obtaining accurate discharge data are poor. The channel is constantly scouring or filling as the stage fluctuates. Both banks are high and well above overflow.

The station, which was maintained in cooperation with P. L. Sherman, jr., was discontinued January 6, 1912.

*Discharge measurements of Alamo River near Brawley, Cal., in 1908–1910.*

[By H. R. Edwards.]

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| 1908. | *Feet.* | *Sec.-ft.* | 1908. | *Feet.* | *Sec.-ft.* | 1908. | *Feet.* | *Sec.-ft.* |
| Jan. 7 | 6.6 | 632 | Mar. 9 | 5.9 | 300 | Apr. 28 | 5.0 | 115 |
| 8 | 6.5 | 519 | 11 | 5.3 | 152 | 30 | 5.5 | 188 |
| 10 | 6.4 | 573 | 13 | 5.0 | 100 | May 2 | 5.6 | 181 |
| 13 | 6.6 | 542 | 14 | 5.3 | 190 | 4 | 5.4 | 174 |
| 15 | 6.2 | 416 | 16 | 5.2 | 141 | 6 | 5.8 | 214 |
| 17 | 6.2 | 379 | 18 | 4.8 | 88 | 8 | 5.8 | 242 |
| 20 | 6.2 | 374 | 22 | 5.5 | 105 | 10 | 5.1 | 102 |
| 23 | 6.2 | 383 | 23 | 5.1 | 117 | June 21 | 6.0 | 394 |
| 26 | 6.4 | 428 | 24 | 5.6 | 186 | 22 | 5.5 | 254 |
| 27 | 6.6 | 438 | 25 | 5.8 | 253 | 23 | 5.3 | 168 |
| 29 | 6.6 | 496 | 27 | 5.5 | 198 | 24 | 5.5 | 220 |
| 31 | 6.5 | 411 | 29 | 5.7 | 254 | 26 | 6.2 | 417 |
| Feb. 2 | 6.5 | 395 | 31 | 5.0 | 93 | 27 | 5.9 | 331 |
| 4 | 7.3 | 697 | Apr. 5 | 5.8 | 258 | 28 | 5.9 | 307 |
| 6 | 6.8 | 585 | 7 | 5.0 | 96 | 29 | 5.7 | 268 |
| 10 | 5.9 | 270 | 9 | 4.4 | 52 | 30 | 5.5 | 222 |
| 12 | 6.1 | 357 | 11 | 4.6 | 65 | July 1 | 5.7 | 274 |
| 14 | 5.4 | 142 | 13 | 4.9 | 90 | 2 | 5.2 | 163 |
| 23 | 4.2 | 39 | 15 | 5.0 | 107 | 3 | 5.2 | 155 |
| 25 | 6.0 | 312 | 17 | 5.2 | 122 | 4 | 6.4 | 520 |
| 27 | 5.8 | 256 | 19 | 5.9 | 275 | 6 | 6.7 | 589 |
| 29 | 5.9 | 309 | 20 | 6.1 | 355 | 7 | 6.1 | 401 |
| Mar. 2 | 6.0 | 412 | 22 | 6.1 | 377 | 8 | 5.6 | 228 |
| 4 | 6.1 | 337 | 24 | 6.4 | 432 | | | |
| 6 | 5.9 | 266 | 26 | 5.1 | 142 | | | |

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1909. | | *Feet.* | *Sec.-ft.* | 1910. | | *Feet.* | *Sec.-ft.* |
| Jan. 14 | Hardy and Jones | 5.01 | 213 | Jan. 9 | A. H. Koebig, jr | 7.10 | 1,030 |
| June 24 | W. F. Martin | 5.40 | 401 | Feb. 5 | W. B. Clapp | 4.00 | 98 |
| July 30 | .....do | 5.26 | 290 | May 3 | G. C. Noble | 4.30 | 95 |
| Sept. 12 | A. H. Koebig, jr | 6.00 | 675 | Sept. 16 | N. F. Shaw | 5.80 | 395 |
| Dec. 31 | .....do | 4.70 | 164 | Oct. 16 | P. L. Sherman, jr | 5.80 | 436 |
| | | | | Dec. 18 | .....do | 5.30 | 288 |

*Daily gage height, in feet, of Alamo River near Brawley, Cal., for 1909–1912.*

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | 1909. | | | | |
| 1 | | 5.95 | 5.5 | 8.0 | 16 | | 4.7 | 5.95 | 5.4 |
| 2 | | 5.8 | 5.45 | 7.6 | 17 | | 4.8 | 7.65 | 5.2 |
| 3 | | 5.9 | 5.3 | 7.1 | 18 | | 4.95 | 7.65 | [illegible] |
| 4 | | 5.85 | 5.35 | 6.8 | 19 | | 5.05 | 8.3 | [illegible] |
| 5 | | 5.9 | 5.2 | 6.3 | 20 | | 4.85 | 8.1 | 5.25 |
| 6 | | 5.7 | 5.3 | 4.95 | 21 | | 4.8 | 7.9 | 5.7 |
| 7 | | 5.5 | 5.3 | 5.1 | 22 | | 4.95 | 8.4 | 5.6 |
| 8 | | 5.4 | 5.35 | 5.55 | 23 | | 4.75 | 8.35 | 5.35 |
| 9 | | 5.35 | 5.4 | 6.3 | 24 | 5.5 | 4.65 | 8.4 | 5.4 |
| 10 | | 5.4 | 5.35 | 6.2 | 25 | 5.65 | 5.45 | 8.4 | 5.45 |
| 11 | | 5.65 | 5.15 | 6.0 | 26 | 5.8 | 5.45 | 8.5 | [illegible] |
| 12 | | 5.6 | 5.0 | 6.0 | 27 | 5.65 | 4.9 | 8.4 | [illegible] |
| 13 | | 5.45 | 5.05 | 6.4 | 28 | 5.9 | 4.85 | 7.8 | 5.8 |
| 14 | | 5.15 | 5.3 | 5.85 | 29 | 5.95 | 4.95 | 5.95 | 5.85 |
| 15 | | 4.8 | 5.45 | 5.8 | 30 | 5.95 | 5.2 | 5.95 | 6.2 |
| | | | | | 31 | | 5.3 | 7.15 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 5.8 | 5.4 | 5.65 | 4.9 | 4.35 | 3.25 | 3.85 | 4.45 | 4.1 | 4.3 | ....... | 4.15 |
| 2 | 5.75 | 5.35 | 5.45 | 4.9 | 4.5 | 3.2 | 3.8 | 4.5 | 4.25 | 4.15 | ....... | [illegible] |
| 3 | 5.65 | 5.45 | 5.4 | 4.75 | 4.4 | 3.2 | 3.9 | 4.4 | 4.2 | 4.05 | ....... | 3.85 |
| 4 | 5.45 | 5.45 | 5.4 | 6.55 | 4.35 | 3.2 | 3.95 | 4.35 | 4.05 | 4.2 | ....... | 3.9 |
| 5 | 5.75 | 5.3 | 5.45 | 6.9 | 3.95 | 3.2 | 3.8 | 4.0 | 4.0 | 4.35 | ....... | 4.25 |
| 6 | 5.55 | 5.3 | 5.45 | 7.0 | 3.75 | 3.2 | 3.7 | 3.9 | 4.2 | 4.2 | ....... | 4.35 |
| 7 | 5.6 | 5.25 | 5.4 | 7.25 | 3.7 | 3.25 | 3.65 | 4.25 | 3.9 | 4.1 | ....... | [illegible] |
| 8 | 5.65 | 5.35 | 5.4 | 7.1 | 4.25 | 3.4 | 3.75 | 4.5 | 3.8 | 4.3 | ....... | [illegible] |
| 9 | 5.65 | 5.15 | 5.5 | 7.05 | 3.8 | 3.25 | 3.7 | 4.4 | 3.95 | 4.2 | ....... | 4.7 |
| 10 | 5.35 | 5.2 | 5.8 | 6.55 | 3.6 | 3.25 | 3.9 | 4.25 | 3.8 | 4.15 | ....... | [illegible] |
| 11 | 5.25 | 5.25 | 5.8 | 6.4 | 3.5 | 3.3 | 4.1 | 4.25 | 4.0 | 4.1 | ....... | 4.6 |
| 12 | 5.25 | 5.2 | 6.1 | 6.45 | 3.5 | 3.4 | 3.9 | 4.1 | 4.25 | 3.95 | ....... | [illegible] |
| 13 | 5.2 | 5.25 | 6.1 | 5.9 | 3.4 | 3.5 | 3.9 | 4.15 | 4.0 | 3.95 | ....... | [illegible] |
| 14 | 5.1 | 5.35 | 5.8 | 5.25 | 3.45 | 3.35 | 3.7 | 4.0 | 4.05 | 4.05 | ....... | 5.3 |
| 15 | 5.05 | 5.35 | 5.8 | 5.15 | 3.35 | 3.25 | 3.85 | 4.3 | 3.8 | 3.95 | ....... | [illegible] |
| 16 | 5.0 | 5.4 | 5.85 | 4.75 | 3.4 | 3.3 | 3.95 | 4.4 | 3.8 | 4.0 | ....... | 5.9 |
| 17 | 5.05 | 5.35 | 5.55 | 4.45 | 3.4 | 3.35 | 3.85 | 4.25 | 3.85 | 4.0 | ....... | 5.75 |
| 18 | 5.15 | 5.35 | 5.45 | 4.35 | 3.4 | 3.4 | 4.0 | 4.1 | 3.75 | 3.8 | ....... | [illegible] |
| 19 | 5.2 | 5.5 | 5.35 | 4.25 | 3.4 | 3.45 | 3.75 | 4.15 | 4.0 | 3.85 | ....... | 5.75 |
| 20 | 5.2 | 5.65 | 5.2 | 4.4 | 3.35 | 3.4 | 4.05 | 4.15 | 4.05 | 3.85 | ....... | [illegible] |
| 21 | 5.25 | 5.45 | 5.15 | 4.55 | 3.3 | 3.35 | 3.8 | 4.0 | 3.9 | 3.9 | ....... | 5.9 |
| 22 | 5.25 | 5.6 | 5.3 | 4.65 | 3.3 | 3.4 | 4.0 | 4.1 | 3.85 | 3.95 | ....... | 5.8 |
| 23 | 5.2 | 5.35 | 5.2 | 4.95 | 3.3 | 3.45 | 3.8 | 4.25 | 3.85 | 3.9 | ....... | [illegible] |
| 24 | 5.2 | 5.3 | 5.25 | 4.85 | 3.3 | 3.6 | 3.85 | 4.25 | 4.0 | 3.8 | ....... | 5.25 |
| 25 | 5.15 | 5.4 | 5.55 | 4.95 | 3.3 | 3.5 | 4.0 | 4.0 | 4.3 | 3.7 | 4.3 | 5.2 |
| 26 | 5.15 | 5.55 | 5.55 | 4.8 | 3.3 | 3.55 | 4.0 | 4.1 | 4.3 | 3.65 | ....... | 5.2 |
| 27 | 5.2 | 5.6 | 5.65 | 4.45 | 3.2 | 3.8 | 3.85 | 4.0 | 4.55 | 3.35 | ....... | 5.1 |
| 28 | 5.1 | 5.75 | 5.35 | 4.45 | 3.25 | 3.65 | 3.85 | 4.2 | 4.7 | 3.3 | 3.85 | 5.4 |
| 29 | 5.2 | 5.8 | 5.0 | 4.45 | ....... | 3.8 | 4.0 | 4.3 | 4.85 | ....... | 4.15 | 5.2 |
| 30 | 5.3 | 5.8 | 4.85 | 4.5 | ....... | 3.85 | 4.35 | 4.35 | 4.2 | ....... | 3.95 | [illegible] |
| 31 | 5.3 | ....... | 4.55 | 4.45 | ....... | 3.8 | ....... | 4.0 | ....... | ....... | 4.0 | ..... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 5.1 | 6.0 | 5.2 | 5.7 | 5.1 | 4.0 | 4.0 | 5.3 | 5.6 | ...... | 6.0 | [illegible] |
| 2 | 5.0 | 6.0 | 5.1 | ....... | 5.3 | 4.4 | 5.0 | 5.4 | 5.4 | 5.5 | 5.6 | [illegible] |
| 3 | 5.15 | 6.1 | 5.2 | 5.8 | 5.4 | 4.2 | 4.9 | 5.4 | 5.5 | ....... | 5.2 | 4.5 |
| 4 | 5.65 | 6.3 | 5.2 | 5.6 | 5.8 | 4.3 | 4.8 | 5.4 | 5.6 | ....... | 5.3 | 4.8 |
| 5 | 5.55 | 6.6 | 5.1 | 5.4 | 6.0 | 4.3 | 5.0 | 5.4 | 5.7 | 5.6 | 5.5 | [illegible] |
| 6 | 5.4 | 6.1 | 5.4 | 5.3 | 6.2 | 4.4 | 5.0 | 5.3 | 5.5 | 5.6 | 5.3 | 4.1 |
| 7 | 5.1 | 6.5 | 5.1 | 5.4 | 6.0 | 4.2 | 4.9 | 5.0 | 5.4 | 5.5 | 5.5 | 4.9 |
| 8 | 5.45 | 6.6 | 4.9 | 5.3 | 6.0 | 4.3 | 5.1 | 5.1 | 5.5 | 5.9 | 5.6 | 4.7 |
| 9 | 5.8 | 6.0 | 4.8 | 5.4 | 6.3 | 4.3 | 5.2 | 5.0 | 5.4 | 6.0 | 5.5 | 5.0 |
| 10 | 5.65 | 6.2 | 5.1 | 5.0 | 6.2 | 4.3 | 5.5 | 4.6 | 5.7 | 5.9 | 5.0 | 4.8 |
| 11 | 5.6 | 6.3 | 5.0 | 5.5 | 6.0 | 4.2 | 5.3 | 4.4 | 5.5 | 5.8 | 4.9 | 4.5 |
| 12 | 5.6 | 6.2 | 4.9 | 5.6 | 5.7 | 4.0 | 4.8 | 4.0 | 5.5 | 6.0 | 4.7 | 4.2 |
| 13 | 6.15 | 6.2 | 5.0 | 5.4 | 5.4 | 4.0 | 4.0 | 4.0 | 5.4 | 6.1 | 4.9 | 3.9 |
| 14 | 6.35 | 7.0 | 4.8 | 5.4 | 5.1 | 4.0 | 4.1 | 4.5 | 5.5 | 6.2 | 4.8 | [illegible] |
| 15 | 5.65 | 7.0 | 5.2 | 5.5 | 6.0 | 3.9 | 3.7 | 4.8 | 5.7 | 6.4 | 4.9 | [illegible] |

*Daily gage height, in feet, of Alamo River near Brawley, Cal., for 1909–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 16 | 5.7 | 7.0 | 5.2 | 5.7 | 4.8 | 3.7 | 4.0 | 4.4 | 5.8 | 5.0 | 4.9 | 5.0 |
| 17 | 6.0 | 7.0 | 5.5 | 5.5 | 5.6 | 3.7 | 4.1 | 5.0 | 5.5 | 4.5 | 4.7 | 4.7 |
| 18 | 6.05 | 6.6 | 5.2 | 5.4 | 5.5 | 3.8 | 4.2 | 5.5 | 5.3 | 4.5 | 4.4 | 5.1 |
| 19 | 6.2 | 6.3 | 5.1 | 5.6 | 5.3 | 4.0 | 3.5 | 5.3 | 5.4 | ...... | 4.6 | 4.9 |
| 20 | 6.5 | 6.4 | 5.5 | 5.7 | 5.1 | 4.0 | 3.7 | 5.2 | 5.5 | 6.2 | 4.7 | 4.6 |
| 21 | 6.1 | 5.8 | 5.1 | 5.6 | 5.2 | 3.9 | 4.5 | 5.5 | 5.4 | 6.0 | 4.5 | 4.8 |
| 22 | 5.8 | 5.4 | 5.3 | 5.5 | 4.5 | 3.6 | 4.4 | 5.7 | 5.3 | ...... | 4.4 | 5.0 |
| 23 | 6.0 | 4.9 | 5.5 | 5.6 | 4.3 | 4.0 | 4.3 | 5.5 | 5.1 | ...... | 4.2 | 5.4 |
| 24 | 6.1 | 4.8 | 5.4 | 5.3 | 4.2 | 4.1 | 4.4 | 5.6 | 5.3 | ...... | 4.2 | 5.0 |
| 25 | 5.9 | 5.2 | 5.5 | 5.2 | 4.5 | 4.0 | 4.6 | 5.7 | 4.9 | 6.8 | 4.0 | 5.2 |
| 26 | 5.9 | 5.3 | 5.4 | 5.4 | 4.3 | 4.2 | 4.5 | 5.6 | 5.3 | 6.6 | 4.2 | 5.0 |
| 27 | 5.5 | 5.3 | 5.5 | 5.5 | 4.5 | 4.4 | 4.8 | 5.5 | 5.5 | 6.5 | 4.1 | 5.0 |
| 28 | 5.3 | 5.0 | 5.4 | 5.5 | 4.2 | 4.4 | 4.5 | 5.6 | 5.4 | 6.5 | 4.3 | 5.2 |
| 29 | 5.0 | 5.2 | 5.5 | 5.2 | ...... | 4.1 | 4.7 | 5.5 | 6.0 | 6.5 | 4.2 | 5.5 |
| 30 | 5.7 | 5.1 | 5.2 | 5.5 | ...... | 4.2 | 5.0 | 5.5 | 5.9 | 6.5 | 4.4 | 5.6 |
| 31 | 6.1 | ...... | 5.4 | 5.4 | ...... | 4.1 | ...... | 5.4 | ...... | 6.5 | 4.5 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Day. | Oct. | Nov. | Dec. | Jan. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | 1911–12. | | | | |
| 1 | 5.8 | 6.6 | 6.2 | 5.8 | 16 | 5.8 | 6.7 | 6.4 | ...... |
| 2 | 5.5 | 6.5 | 6.4 | 5.9 | 17 | 6.0 | 6.3 | 6.8 | ...... |
| 3 | 5.7 | 6.7 | 6.5 | 5.3 | 18 | 5.7 | 6.3 | 6.9 | ...... |
| 4 | 5.4 | 6.6 | 6.8 | 5.2 | 19 | 5.8 | 6.8 | 6.7 | ...... |
| 5 | 5.5 | 7.0 | 6.5 | 4.8 | 20 | 5.5 | 6.4 | 6.5 | ...... |
| 6 | 5.5 | 7.1 | 6.4 | 6.0 | 21 | 5.8 | 6.3 | 6.3 | ...... |
| 7 | 5.6 | 7.2 | 6.5 | ...... | 22 | 6.0 | 6.5 | 6.0 | ...... |
| 8 | 5.2 | 7.1 | 6.5 | ...... | 23 | 6.1 | 5.8 | 5.8 | ...... |
| 9 | 5.6 | 7.0 | 6.3 | ...... | 24 | 6.2 | 5.5 | 5.7 | ...... |
| 10 | 5.8 | 6.8 | 6.5 | ...... | 25 | 6.0 | 6.0 | 6.0 | ...... |
| 11 | 5.8 | 5.7 | 6.3 | ...... | 26 | 5.8 | 6.1 | 6.1 | ...... |
| 12 | 5.6 | 5.5 | 6.2 | ...... | 27 | 6.0 | 6.2 | 5.8 | ...... |
| 13 | 5.5 | 5.5 | 6.3 | ...... | 28 | 6.1 | 6.2 | 5.6 | ...... |
| 14 | 5.3 | 5.7 | 6.0 | ...... | 29 | 6.2 | 5.8 | 5.5 | ...... |
| 15 | 6.0 | 6.1 | 6.5 | ...... | 30 | 6.5 | 6.0 | 5.5 | ...... |
| | | | | | 31 | 6.1 | ...... | 5.7 | ...... |

*Daily discharge, in second-feet, of Alamo River near Brawley, Cal., for 1909–10.*

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | 1909. | | | | |
| 1 | ...... | 604 | 410 | 1,480 | 16 | ...... | 176 | 604 | 368 |
| 2 | ...... | 539 | 389 | 1,310 | 17 | ...... | 194 | 1,330 | 293 |
| 3 | ...... | 582 | 328 | 1,100 | 18 | ...... | 226 | 1,330 | 278 |
| 4 | ...... | 560 | 348 | 969 | 19 | ...... | 250 | 1,610 | 237 |
| 5 | ...... | 582 | 293 | 754 | 20 | ...... | 204 | 1,530 | 310 |
| 6 | ...... | 496 | 328 | 226 | 21 | ...... | 194 | 1,440 | 496 |
| 7 | ...... | 410 | 328 | 263 | 22 | ...... | 226 | 1,660 | 453 |
| 8 | ...... | 368 | 348 | 432 | 23 | ...... | 185 | 1,640 | 348 |
| 9 | ...... | 348 | 368 | 754 | 24 | 410 | 168 | 1,660 | 368 |
| 10 | ...... | 368 | 348 | 711 | 25 | 474 | 389 | 1,660 | 389 |
| 11 | ...... | 474 | 278 | 625 | 26 | 539 | 389 | 1,700 | 432 |
| 12 | ...... | 453 | 237 | 625 | 27 | 474 | 214 | 1,660 | 474 |
| 13 | ...... | 389 | 250 | 797 | 28 | 582 | 204 | 1,400 | 539 |
| 14 | ...... | 278 | 328 | 560 | 29 | 604 | 226 | 604 | 560 |
| 15 | ...... | 194 | 389 | 539 | 30 | 604 | 293 | 604 | 711 |
| | | | | | 31 | ...... | 328 | 1,120 | ...... |

*Daily discharge, in second-feet, of Alamo River near Brawley, Cal., for 1909–1910*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 339 | [illegible] | 474 | 192 | 17 | 38 | 74 | 128 | 93 | 112 | .... | 98 |
| 2 | [illegible] | 448 | 589 | 592 | 134 | 36 | 71 | 134 | 107 | 98 | .... | 98 |
| 3 | 474 | 389 | 368 | [illegible] | 122 | 36 | 78 | 122 | 102 | 49 | .... | 74 |
| 4 | 389 | 389 | 338 | 716 | 117 | 36 | 82 | 117 | 89 | 102 | .... | 78 |
| 5 | 418 | 328 | 389 | 910 | 82 | 36 | 71 | 85 | 85 | 117 | .... | 85 |
| 6 | 462 | 328 | 389 | 672 | 98 | 36 | 64 | 78 | 102 | 102 | .... | 117 |
| 7 | [illegible] | 410 | 368 | 1,150 | 64 | 38 | 61 | 107 | 79 | 63 | .... | [illegible] |
| 8 | 474 | 448 | 368 | 1,140 | 107 | 46 | 68 | 134 | 71 | 112 | .... | [illegible] |
| 9 | 474 | 278 | 410 | 1,000 | 71 | 38 | 64 | 122 | 82 | 102 | .... | 134 |
| 10 | 348 | 293 | 339 | 716 | 58 | 28 | 78 | 107 | 71 | 98 | .... | 82 |
| 11 | 310 | 410 | 339 | 647 | 52 | 41 | 93 | 107 | 85 | 93 | .... | 146 |
| 12 | 310 | 293 | 368 | [illegible] | 52 | 46 | 78 | 93 | 107 | 82 | .... | 153 |
| 13 | 293 | 310 | 368 | 450 | 46 | 52 | 78 | 98 | 85 | 82 | .... | 230 |
| 14 | 263 | 348 | 339 | 254 | 49 | 44 | 64 | 85 | 99 | 99 | .... | [illegible] |
| 15 | 250 | 348 | 339 | 241 | 44 | 38 | 74 | 112 | 71 | 82 | .... | 370 |
| 16 | 237 | 368 | 740 | 168 | 46 | 41 | 82 | 122 | 71 | 85 | .... | 450 |
| 17 | 250 | 348 | 462 | 128 | 46 | 44 | 74 | 107 | 74 | 85 | .... | 591 |
| 18 | 278 | 348 | 389 | 117 | 46 | 46 | 85 | 93 | 68 | 71 | .... | [illegible] |
| 19 | 293 | 410 | 348 | 117 | 46 | 49 | 68 | 98 | 85 | 74 | .... | [illegible] |
| 20 | 293 | 474 | 293 | 122 | 44 | 46 | 89 | 98 | 89 | 74 | .... | [illegible] |
| 21 | 310 | 389 | 278 | 140 | 41 | 44 | 71 | 85 | 78 | 78 | .... | [illegible] |
| 22 | 310 | 453 | 28 | 153 | 41 | 46 | 85 | 93 | 74 | 82 | .... | [illegible] |
| 23 | 293 | 348 | 293 | 201 | 41 | 49 | 71 | 107 | 74 | 78 | .... | [illegible] |
| 24 | 293 | 328 | 310 | 184 | 41 | 58 | 74 | 107 | 85 | 71 | .... | [illegible] |
| 25 | 278 | 368 | 432 | 201 | 41 | 52 | 85 | 85 | 112 | 64 | 112 | [illegible] |
| 26 | 278 | 432 | 432 | 175 | 41 | 55 | 85 | 93 | 112 | 61 | .... | [illegible] |
| 27 | 293 | 453 | 474 | 128 | 36 | 71 | 74 | 85 | 140 | 44 | .... | [illegible] |
| 28 | 263 | 718 | 348 | 128 | 28 | 61 | 74 | 102 | 160 | 41 | 74 | [illegible] |
| 29 | 293 | 339 | 237 | 128 | .... | 71 | 85 | 112 | 184 | .... | 96 | 252 |
| 30 | 328 | 339 | 204 | 134 | .... | 74 | 117 | 117 | 102 | .... | 92 | 261 |
| 31 | 328 | .... | 353 | 128 | .... | 71 | .... | 85 | .... | .... | 85 | .... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | 1910. | | | | 1980. | | | |
| 1 | 230 | 484 | 252 | 11 | 355 | 604 | 210 | 21 | 521 | 417 | [illegible] |
| 2 | 210 | 484 | 230 | 12 | 355 | 561 | 192 | 22 | 417 | 301 | [illegible] |
| 3 | 241 | 521 | 252 | 13 | 541 | 561 | 210 | 23 | 484 | 192 | [illegible] |
| 4 | 370 | 604 | 252 | 14 | 716 | 972 | 175 | 24 | 521 | 175 | [illegible] |
| 5 | 341 | 740 | 230 | 15 | 370 | 972 | 252 | 25 | 450 | 252 | [illegible] |
| 6 | 301 | 521 | 301 | 16 | 385 | 972 | 252 | 26 | 450 | 276 | [illegible] |
| 7 | 230 | 691 | 230 | 17 | 484 | 972 | 327 | 27 | 327 | 276 | [illegible] |
| 8 | 514 | 740 | 192 | 18 | 502 | 740 | 252 | 28 | 276 | 230 | [illegible] |
| 9 | 417 | 484 | 175 | 19 | 561 | 604 | 230 | 29 | 210 | 252 | [illegible] |
| 10 | 370 | 561 | 230 | 20 | 691 | 647 | 327 | 30 | 385 | 230 | [illegible] |
| | | | | | | | | 31 | 521 | .... | [illegible] |

NOTE.—Daily discharge determined from two rating curves fairly well defined above a discharge of 100 second-feet applicable as follows: Jan. 1 to Dec. 31, 1909, and Jan. 1 to Dec. 31, 1919.

*Monthly discharge of Alamo River near Brawley for 1909–10.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1909.** | | | | | |
| June 24–30 | 604 | 410 | 529 | 7,340 | B. |
| July | 604 | 168 | 339 | 20,800 | B. |
| August | 1,700 | 237 | 856 | 52,600 | B. |
| September | 1,480 | 226 | 580 | 34,500 | B. |
| **1909–10.** | | | | | |
| October | 539 | 237 | 344 | 21,200 | B. |
| November | 539 | 278 | 377 | 22,400 | B. |
| December | 668 | 153 | 404 | 24,800 | B. |
| January | 1,150 | 107 | 376 | 23,100 | B. |
| February | 134 | 36 | 61.8 | 3,430 | C. |
| March | 74 | 36 | 47.6 | 2,930 | C. |
| April | 117 | 61 | 77.2 | 4,590 | C. |
| May | 134 | 78 | 104 | 6,400 | B. |
| June | 184 | 68 | 94.2 | 5,610 | B. |
| July (28 days) | 117 | 41 | 84.3 | 4,680 | C. |
| September | 541 | 74 | 248 | 14,800 | B. |
| **1910.** | | | | | |
| October | 716 | 210 | 405 | 24,900 | B. |
| November | 972 | 175 | 534 | 31,800 | B. |
| December | 327 | 175 | 259 | 15,900 | B. |

### NEW RIVER NEAR BRAWLEY, CAL.

During 1908 discharge measurements were made at a wagon bridge over New River, 1½ miles west of Brawley, Cal., by H. R. Edwards, engineer for the New Liverpool Salt Co. During 1909 measurements were made by engineers of the United States Geological Survey. On June 24, 1909, a continuous record of gage heights was begun at this point. The staff gage is spiked vertically to the third bridge pile from the right bank. The datum of the gage has remained the same during the maintenance of the station. At high stages discharge measurements are made from the bridge, but at medium and low stage measurements are made by wading near the bridge.

The data obtained at this station, together with those obtained on Alamo River, show the amount of waste water reaching Salton Sea and are of value in connection with experiments being made by the United States Weather Bureau to determine the evaporation from Salton Sea.

Conditions for obtaining accurate discharge data are exceedingly poor. The great amount of fine silt carried by this stream causes continual changes in the channel. The current is light at low stages. Floods occur at long intervals and are extremely torrential.

Conditions at this station during 1909 were fairly good up to the middle of August, when heavy rains fell in the Imperial Valley and surrounding country. A considerable flood occurred on New River, washing out the earth approaches to the bridge, and changing the channel so completely that measurements made prior to August are not comparable with those that will be made later. Probably the channel was fairly stable after October 1, 1909, but sufficient dis-

charge measurements have not been made to define the new rating curve. Estimates of flow are therefore withheld.

This station was maintained in cooperation with P. T. Sherman, jr.

*Discharge measurements of New River near Brawley, Cal., in 1908–1910.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1908. | | *Feet.* | *Sec.-ft.* | 1909. | | *Feet.* | *Sec.-ft.* |
| Feb. 23 | H. R. Edwards | | 44 | Jan. 14 | H. A. Jones | 6.00 | 47 |
| Mar. 23 | do | | 36 | June 24 | W. F. Martin | 6.31 | [illegible] |
| Apr. 5 | do | | 39 | July 30 | do | 6.18 | [illegible] |
| 13 | do | | 40 | | | | |
| June 22 | do | | 26 | 1910. | | | |
| | | | | Feb. 4 | W. B. Clapp | 4.80 | [illegible] |
| 1909. | | | | | | | |
| Jan. 8 | Hardy and Jones | | 46 | | | | |

*Daily gage height, in feet, of New River near Brawley, Cal., for 1909–10.*

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | 1909. | | | | |
| 1 | | 6.15 | 6.2 | 6.8 | 16 | | 6.2 | 6.85 | 5.0 |
| 2 | | 6.1 | 6.2 | 6.15 | 17 | | 6.25 | 6.8 | 5.0 |
| 3 | | 6.1 | 6.25 | 5.5 | 18 | | 6.25 | 6.8 | 5.0 |
| 4 | | 6.15 | 6.25 | 5.5 | 19 | | 6.0 | 7.1 | 5.0 |
| 5 | | 6.1 | 6.25 | 5.5 | 20 | | 5.9 | 7.05 | 5.0 |
| 6 | | 6.1 | 5.9 | 5.6 | 21 | | 5.9 | 6.75 | 5.0 |
| 7 | | 6.1 | 5.9 | 5.6 | 22 | | 5.85 | 6.6 | 5.0 |
| 8 | | 6.15 | 5.9 | 5.3 | 23 | | 5.8 | 6.6 | 5.0 |
| 9 | | 6.2 | 5.9 | 5.3 | 24 | 6.3 | 5.8 | 6.3 | 5.0 |
| 10 | | 6.2 | 5.9 | 5.3 | 25 | 6.3 | 6.0 | 5.95 | 4.95 |
| 11 | | 6.2 | 5.9 | 5.2 | 26 | 6.3 | 6.05 | | 5.0 |
| 12 | | 6.2 | 6.2 | 5.1 | 27 | 6.25 | 6.1 | | 4.95 |
| 13 | | 6.2 | 7.15 | 5.0 | 28 | 6.3 | 6.15 | | 5.05 |
| 14 | | 6.2 | 7.0 | 5.1 | 29 | 6.25 | 6.2 | | 5.0 |
| 15 | | 6.2 | 6.9 | 5.0 | 30 | 6.2 | 6.2 | a9.2 | 4.9 |
| | | | | | 31 | | 6.2 | 8.75 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 5.0 | 4.9 | 4.8 | 5.1 | 4.7 | 4.65 | 4.75 | 5.3 | 5.2 | 5.3 | 4.8 | 4.9 |
| 2 | 4.9 | 4.85 | 4.9 | 5.0 | 4.7 | 4.75 | 4.8 | 5.1 | 5.1 | 5.3 | 4.8 | 4.9 |
| 3 | 4.95 | 4.85 | 4.8 | 5.0 | 4.7 | 4.7 | 5.4 | 5.1 | 5.0 | 5.3 | 4.7 | 5.0 |
| 4 | 4.8 | 4.9 | 4.85 | 5.0 | 4.75 | 4.7 | 5.5 | 5.3 | 5.3 | 5.45 | 4.7 | 4.9 |
| 5 | 4.8 | 4.9 | 4.9 | 4.9 | 4.75 | 4.7 | 5.0 | 5.35 | 5.25 | 5.35 | 4.7 | 4.8 |
| 6 | 4.8 | 4.9 | 4.85 | 4.8 | 4.65 | 4.7 | 5.1 | 5.65 | 5.0 | 5.2 | 4.8 | 4.8 |
| 7 | 4.8 | 4.9 | 4.8 | 4.9 | 4.75 | 4.7 | 4.9 | 5.9 | 5.15 | 5.35 | 4.8 | 4.8 |
| 8 | 4.8 | 4.85 | 4.9 | 4.9 | 4.8 | 4.7 | 4.8 | 5.9 | 5.25 | 5.2 | 4.7 | 4.9 |
| 9 | 4.8 | 4.8 | 4.9 | 4.9 | 4.8 | 4.7 | 4.8 | 5.7 | 5.35 | 5.3 | 4.7 | 4.8 |
| 10 | 4.7 | 4.8 | 4.9 | 4.8 | 4.8 | 4.7 | 4.7 | 5.3 | 5.45 | 5.15 | 4.7 | 5.05 |
| 11 | 4.7 | 4.8 | 4.9 | 4.95 | 4.8 | 4.75 | 4.7 | 5.35 | 5.45 | 4.8 | 4.7 | 5.4 |
| 12 | 4.7 | 4.8 | 4.8 | 4.95 | 4.7 | 4.7 | 4.7 | 5.3 | 5.4 | 4.8 | 4.7 | 5.5 |
| 13 | 4.7 | 4.8 | 4.8 | 4.9 | 4.8 | 4.7 | 4.8 | 5.4 | 5.4 | 4.8 | 4.7 | 5.55 |
| 14 | 4.7 | 4.8 | 4.8 | 4.9 | 4.75 | 4.7 | 4.85 | 5.8 | 5.3 | 4.8 | 4.7 | 5.65 |
| 15 | 4.7 | 4.9 | 4.8 | 4.9 | 4.7 | 4.7 | 4.7 | 5.9 | 5.3 | 4.8 | 4.7 | 5.55 |
| 16 | 4.7 | 4.9 | 4.8 | 4.9 | 4.6 | 4.7 | 4.8 | 5.45 | 5.5 | 4.9 | 4.7 | 5.45 |
| 17 | 4.7 | 4.9 | 4.8 | 4.9 | 4.6 | 4.8 | 4.7 | 5.3 | 5.85 | 4.9 | 4.7 | 5.4 |
| 18 | 4.7 | 4.9 | 4.95 | 4.8 | 4.7 | 4.8 | 4.8 | 5.1 | 6.0 | 4.9 | 4.7 | 5.4 |
| 19 | 4.7 | 4.85 | 4.85 | 4.85 | 4.7 | 4.7 | 4.85 | 4.8 | 5.85 | 4.9 | 4.7 | 5.4 |
| 20 | 4.7 | 4.9 | 4.9 | 4.85 | 4.7 | 4.8 | 5.0 | 4.7 | 5.65 | 4.9 | 4.7 | 5.4 |

a Estimated. Maximum gage height was 12.5 feet.

*Daily gage height, in feet, of New River near Brawley, Cal., for 1909–10*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 21 | 4.7 | 4.9 | 5.15 | 4.8 | 4.75 | 4.75 | 5.0 | 4.7 | 5.45 | 4.9 | 4.75 | 5.4 |
| 22 | 4.7 | 4.9 | 5.0 | 4.9 | 4.8 | 4.8 | 5.4 | 4.8 | 5.25 | 4.8 | 4.8 | 5.4 |
| 23 | 4.7 | 4.9 | 5.0 | 4.9 | 4.7 | 4.7 | 4.9 | 5.0 | 5.35 | 4.7 | 4.8 | 5.4 |
| 24 | 4.7 | 4.85 | 4.9 | 4.9 | 4.65 | 4.8 | 4.7 | 5.2 | 5.25 | 4.7 | 4.8 | 5.25 |
| 25 | 4.7 | 4.9 | 5.0 | 4.8 | 4.7 | 4.8 | 4.7 | 5.5 | 5.4 | 4.7 | 4.8 | 5.25 |
| 26 | 4.7 | 4.9 | 4.0 | 4.8 | 4.7 | 4.8 | 4.9 | 5.5 | 5.3 | 4.7 | 4.8 | 5.3 |
| 27 | 4.7 | 4.8 | 4.9 | 4.8 | 4.7 | 4.8 | 5.0 | 5.35 | 5.2 | 4.7 | 4.7 | 5.3 |
| 28 | 4.7 | 4.9 | 5.0 | 4.8 | 4.7 | 4.8 | 4.95 | 5.2 | 5.15 | 4.8 | 4.8 | 5.3 |
| 29 | 4.65 | 4.9 | 5.0 | 4.7 | ...... | 4.8 | 5.3 | 5.35 | 5.1 | 4.7 | 4.9 | 5.3 |
| 30 | 4.5 | 4.8 | 5.1 | 4.8 | ...... | 4.85 | 5.3 | 5.25 | 5.3 | 4.7 | 4.8 | 5.3 |
| 31 | 4.5 | ...... | 5.1 | 4.7 | ...... | 4.75 | ...... | 5.3 | ...... | 4.8 | 4.8 | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | 1910. | | | | 1919. | | | |
| 1 | 5.25 | 5.2 | 5.5 | 11 | 5.0 | 5.3 | 5.3 | 21 | 4.9 | 5.5 | 5.3 |
| 2 | 5.35 | 5.1 | 5.4 | 12 | 4.9 | 5.3 | 5.2 | 22 | 4.9 | 5.5 | 5.2 |
| 3 | 5.4 | 5.0 | 5.8 | 13 | 4.9 | 5.3 | 5.2 | 23 | 4.9 | 5.6 | 5.2 |
| 4 | 5.4 | 5.3 | 5.6 | 14 | 4.9 | 5.4 | 5.2 | 24 | 4.9 | 5.6 | 5.3 |
| 5 | 5.3 | 5.3 | 5.7 | 15 | 5.0 | 5.3 | 5.2 | 25 | 4.9 | 5.6 | 5.3 |
| 6 | 5.3 | 5.3 | 5.7 | 16 | 4.9 | 5.3 | 5.3 | 26 | 4.9 | 5.5 | 5.4 |
| 7 | 5.3 | 5.3 | 5.7 | 17 | 4.9 | 5.5 | 5.3 | 27 | 4.9 | 5.5 | 5.4 |
| 8 | 5.2 | 5.3 | 5.5 | 18 | 4.8 | 5.5 | 5.4 | 28 | 4.9 | 5.4 | 5.5 |
| 9 | 5.2 | 5.2 | 5.4 | 19 | 4.9 | 5.5 | 5.6 | 29 | 5.0 | 5.4 | 5.6 |
| 10 | 5.2 | 5.3 | 5.3 | 20 | 4.9 | 5.6 | 5.4 | 30 | 5.1 | 5.4 | 5.5 |
| | | | | | | | | 31 | 5.2 | ...... | 5.5 |

## LOWER COLORADO RIVER BASIN.

### COLORADO RIVER AT HARDYVILLE, ARIZ.

This station, which was located a quarter of a mile above the deserted town of Hardyville and 7 miles above Fort Mohave, Ariz., was established May 11, 1905, and discontinued October 1, 1907. It was maintained in cooperation with the State of California.

The bed of the stream is composed of cemented gravel and changes gradually as the river falls from flood stage to low water, a bar forming in that portion of the section nearest the right bank and altering conditions of flow materially. The right bank is composed of cemented gravel, is high and not subject to overflow; the left bank is made up of alluvial material, easily eroded, is low and wooded, and is liable to overflow at flood stages. Discharge measurements were made from a car and cable. The datum of the staff gage, which remained the same as long as the station was maintained, was at elevation 507.18 feet above sea level. The gage was located 275 feet below the cable from which discharge measurements were made.

*Daily gage height, in feet, of Colorado River at Hardyville, Ariz., for 1905–1907*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 1. | a7.35 | 6.65 | 6.7 | 6.65 | 6.8 | 7.7 | 9.8 | 10.2 | 14.4 | 14.8 | 11.05 | 8.5 |
| 2. | 7.5 | 6.6 | 6.65 | 6.85 | 6.9 | 7.7 | 9.7 | 10.2 | 14.0 | 14.6 | 10.8 | 8.45 |
| 3. | 7.7 | a6.7 | 6.7 | 6.75 | 6.8 | ...... | 9.5 | 10.2 | 13.2 | 15.0 | 10.65 | 8.9 |
| 4. | 7.7 | 6.8 | 6.65 | 6.9 | 6.8 | 7.8 | 9.5 | 10.45 | ...... | 15.1 | 10.2 | 9.2 |
| 5. | 7.7 | 6.75 | 6.6 | 6.95 | 6.9 | 8.0 | 9.4 | 10.55 | 13.0 | 15.0 | 10.7 | 8.85 |
| 6. | 7.6 | a6.8 | 6.8 | 7.0 | 7.3 | 7.9 | 9.15 | 10.55 | 12.9 | 15.3 | 10.5 | 8.9 |
| 7. | 7.4 | 6.9 | 7.45 | 6.9 | 7.25 | 8.25 | 9.15 | 10.5 | 13.0 | 15.1 | 10.4 | 8.8 |
| 8. | 7.3 | 6.9 | 8.45 | 6.8 | 7.2 | 8.2 | 9.05 | 10.4 | 13.8 | 15.0 | 10.15 | 8.8 |
| 9. | 7.2 | 7.0 | 7.9 | 6.7 | 7.3 | 8.1 | 9.05 | 10.4 | 14.3 | 15.0 | 9.7 | 8.6 |
| 10. | 7.1 | 7.3 | 7.7 | 6.7 | 7.3 | 8.0 | 9.2 | 10.2 | 14.7 | 14.8 | 9.7 | ...... |
| 11. | 7.1 | 7.3 | a7.6 | 6.6 | 7.3 | 8.3 | 9.3 | 10.0 | 15.35 | 14.7 | 9.45 | 8.1 |
| 12. | 7.1 | a7.3 | 7.5 | 6.55 | ...... | 8.1 | 9.3 | 9.85 | 15.5 | 14.7 | 9.25 | 8.05 |
| 13. | 7.0 | 7.3 | 7.4 | 6.6 | 7.4 | 8.0 | 9.4 | 9.8 | 15.45 | 14.4 | 9.15 | 7.95 |
| 14. | 7.0 | 7.2 | 7.3 | 6.6 | 7.35 | 7.85 | 9.65 | 9.85 | 15.3 | 14.2 | 9.0 | 7.85 |
| 15. | 6.95 | 7.15 | 7.25 | 6.7 | 7.35 | 7.7 | 9.9 | 9.75 | 15.0 | 14.0 | 8.9 | 7.65 |
| 16. | 6.9 | 7.15 | 7.1 | 6.8 | 7.3 | 7.65 | 10.5 | ...... | 15.1 | 13.7 | 8.9 | 7.55 |
| 17. | 6.85 | 7.15 | 6.95 | 6.9 | 7.3 | 7.55 | 11.25 | 10.15 | 15.3 | 13.35 | 8.8 | 7.4 |
| 18. | 6.8 | 7.1 | 6.95 | ...... | 7.4 | 7.5 | 11.8 | 10.65 | 15.0 | 13.0 | 8.75 | 7.5 |
| 19. | 6.8 | 7.0 | 6.9 | 6.9 | 7.5 | 7.6 | 12.05 | 11.1 | 15.4 | 13.2 | 8.7 | 7.6 |
| 20. | 6.75 | 6.9 | 6.9 | 6.85 | 7.6 | 7.5 | 12.35 | 11.3 | 15.4 | 12.9 | 8.6 | 7.35 |
| 21. | 6.7 | 6.85 | 6.9 | 6.75 | 7.45 | ...... | 12.5 | 11.3 | 15.2 | 12.65 | 8.4 | 7.15 |
| 22. | 6.7 | 6.85 | 6.85 | 6.7 | 7.4 | 7.5 | 12.35 | 11.5 | 15.4 | 11.9 | ...... | 7.2 |
| 23. | 6.7 | 6.9 | 6.75 | 6.75 | 7.45 | 7.8 | 12.3 | 11.8 | 15.05 | 11.6 | 8.2 | 7.2 |
| 24. | 6.65 | 6.85 | 6.65 | 6.7 | 7.9 | 7.7 | 12.2 | 12.4 | 15.4 | 11.2 | 8.6 | 7.3 |
| 25. | 6.6 | 6.85 | 6.55 | 6.65 | 7.6 | 7.65 | ...... | 13.6 | 14.8 | 10.9 | ...... | 7.35 |
| 26. | 6.6 | a6.85 | 6.45 | 6.65 | 7.5 | 8.5 | 11.35 | 14.5 | 14.85 | 11.05 | 8.9 | 7.4 |
| 27. | 6.55 | 6.85 | 6.4 | 6.7 | 7.4 | 9.0 | 10.95 | 15.5 | 14.7 | 11.2 | 8.1 | ...... |
| 28. | 6.6 | 6.9 | 6.4 | 6.65 | 7.9 | 9.6 | 10.75 | 15.0 | 14.7 | 10.9 | 8.0 | 7.35 |
| 29. | 6.75 | 6.9 | 6.3 | 6.65 | ...... | 9.5 | 10.5 | 14.9 | 14.7 | 11.15 | 7.9 | 7.1 |
| 30. | a6.75 | 6.8 | 6.35 | 6.5 | ...... | 9.6 | 10.3 | 14.4 | 14.7 | 11.1 | 8.5 | 7.05 |
| 31. | 6.75 | ...... | 6.5 | 6.65 | ...... | 9.8 | ...... | ...... | ...... | 11.1 | 8.75 | ...... |

a Estimated.

*Daily discharge, in second-feet, of Colorado River at Hardyville, Ariz., for 1905–1907.*

| Day. | May. | June. | July. | Aug. | Sept. | Day. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | 1905. | | | | | |
| 1 | ...... | 73,460 | 45,260 | 14,080 | 7,160 | 16 | 32,360 | 92,700 | 23,840 | 10,850 | 7,460 |
| 2 | ...... | 70,700 | 44,020 | 14,080 | 7,160 | 17 | 30,410 | 87,740 | 21,180 | 10,220 | 7,160 |
| 3 | ...... | 67,090 | 43,200 | 15,090 | 5,970 | 18 | 31,190 | 82,880 | 19,690 | 9,600 | 6,560 |
| 4 | ...... | 63,550 | 40,750 | 16,110 | 5,970 | 19 | 32,360 | 80,000 | 19,320 | 9,600 | 5,970 |
| 5 | ...... | 64,430 | 39,940 | 18,950 | 7,460 | 20 | 32,750 | 77,180 | 18,950 | 9,600 | 5,970 |
| 6 | ...... | 73,920 | 37,120 | 17,500 | 8,065 | 21 | 35,520 | 73,920 | 18,220 | 9,290 | 5,090 |
| 7 | ...... | 90,000 | 35,120 | 15,430 | 7,760 | 22 | 41,560 | 69,340 | 18,220 | 9,290 | 5,090 |
| 8 | ...... | 85,790 | 32,750 | 15,430 | 8,370 | 23 | 47,330 | 64,430 | 18,220 | 8,370 | 4,800 |
| 9 | ...... | 91,700 | 30,410 | 16,460 | 7,760 | 24 | 53,280 | 61,810 | 17,150 | 8,370 | 5,090 |
| 10 | ...... | 98,780 | 30,410 | 14,750 | 8,370 | 25 | 56,640 | 58,790 | 16,460 | 8,370 | 4,515 |
| 11 | 31,580 | 97,760 | 28,850 | 14,080 | 10,850 | 26 | 62,680 | 57,500 | 15,430 | 15,770 | 4,515 |
| 12 | 31,970 | 94,700 | 26,160 | 12,770 | 8,990 | 27 | 67,080 | 53,230 | 15,430 | 8,960 | 4,515 |
| 13 | 32,360 | 97,760 | 25,000 | 12,440 | 7,760 | 28 | 70,700 | 49,840 | 15,430 | 7,160 | 4,515 |
| 14 | 33,940 | 99,290 | 23,840 | 11,800 | 7,760 | 29 | 81,920 | 50,680 | 15,430 | 6,560 | 10,540 |
| 15 | 33,940 | 99,800 | 18,950 | 10,850 | 7,460 | 30 | 79,080 | 54,080 | 15,090 | 7,160 | 10,540 |
| | | | | | | 31 | 76,240 | ...... | 14,750 | 7,160 | ...... |

*Daily discharge, in second-feet, of Colorado River at Hardyville, Ariz., for 1905–1907*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905–6. | | | | | | | | | | | | |
| 1 | 9,290 | 5,650 | 29,500 | 3,430 | 6,100 | 6,700 | 33,600 | 45,900 | 83,500 | 62,600 | 25,000 | 15,500 |
| 2 | 11,600 | 5,700 | 26,500 | 3,000 | 5,600 | 6,000 | 36,900 | 42,900 | 91,700 | 59,000 | 25,000 | 13,200 |
| 3 | 15,900 | 6,000 | 18,200 | 3,100 | 5,200 | 6,000 | 32,800 | 41,800 | 95,500 | 55,000 | 29,000 | 12,500 |
| 4 | 13,100 | 5,750 | 14,300 | 2,900 | 5,250 | 5,700 | 27,300 | 41,300 | 94,300 | 51,000 | 27,000 | 13,500 |
| 5 | 18,200 | 5,800 | 11,500 | 2,850 | 5,110 | 5,700 | 27,100 | 36,400 | 95,000 | 50,500 | 24,400 | 13,000 |
| 6 | 15,600 | 5,500 | 10,400 | 3,100 | 5,000 | 5,650 | 23,600 | 34,000 | 96,500 | 47,500 | 21,500 | 13,000 |
| 7 | 15,300 | 6,000 | 10,200 | 3,440 | 5,300 | 5,600 | 21,100 | 34,000 | 94,500 | 48,700 | 18,500 | 12,200 |
| 8 | 14,300 | 8,500 | 9,500 | 3,150 | 5,300 | 5,700 | 21,500 | 28,500 | 93,200 | 47,000 | 20,700 | 13,600 |
| 9 | 14,000 | 7,200 | 8,800 | 3,050 | 5,700 | 5,650 | 21,300 | 35,600 | 91,200 | 47,500 | 18,800 | 13,600 |
| 10 | 12,000 | 7,000 | 7,400 | 3,300 | 6,100 | 5,600 | 22,100 | 42,500 | 92,000 | 44,100 | 19,100 | 13,600 |
| 11 | 10,300 | 6,000 | 6,300 | 3,200 | 6,200 | 5,700 | 22,800 | 52,700 | 93,200 | 41,000 | 20,500 | 12,000 |
| 12 | 8,900 | 6,500 | 6,300 | 3,250 | 6,400 | 5,800 | 22,900 | 58,500 | 95,800 | 39,600 | 17,800 | 12,600 |
| 13 | 7,900 | 6,200 | 6,700 | 3,200 | 6,200 | 6,700 | 27,000 | 65,800 | 91,000 | 39,000 | 18,000 | 12,100 |
| 14 | 7,200 | 5,200 | 6,700 | 3,500 | 6,200 | 7,500 | 26,100 | 72,800 | 100,000 | 34,500 | 17,500 | 12,100 |
| 15 | 6,200 | 6,700 | 6,000 | 3,450 | 6,000 | 10,600 | 24,600 | 71,500 | 100,000 | 34,600 | 17,200 | 12,100 |
| 16 | 6,000 | 6,100 | 6,000 | 3,700 | 6,050 | 15,000 | 25,200 | 77,100 | 101,000 | 33,500 | 17,300 | 11,700 |
| 17 | 5,300 | 5,800 | 6,000 | 4,500 | 6,100 | 19,300 | 25,700 | 78,000 | 105,000 | 36,000 | 17,600 | 11,300 |
| 18 | 5,600 | 5,900 | 6,000 | 4,800 | 5,900 | 19,000 | 27,200 | 72,300 | 110,000 | 35,700 | 16,200 | 12,000 |
| 19 | 5,600 | 5,980 | 5,300 | 5,200 | 5,800 | 15,400 | 27,200 | 68,000 | 115,000 | 36,500 | 16,500 | 15,000 |
| 20 | 5,200 | 6,000 | 5,300 | 5,700 | 5,600 | 14,300 | 27,300 | 63,700 | 116,000 | 37,200 | 14,000 | 12,500 |
| 21 | 4,850 | 5,400 | 5,600 | 5,900 | 5,850 | 14,900 | 30,200 | 68,500 | 113,000 | 39,700 | 13,500 | 10,800 |
| 22 | 4,800 | 5,500 | 6,000 | 7,300 | 5,900 | 14,300 | 32,200 | 73,500 | 113,000 | 38,500 | 12,500 | 11,800 |
| 23 | 4,800 | 5,600 | 6,700 | 7,000 | 6,000 | 13,500 | 34,100 | 81,000 | 106,000 | 38,000 | 15,000 | 16,500 |
| 24 | 5,050 | 6,350 | 6,700 | 6,700 | 6,050 | 13,200 | 37,100 | 83,000 | 100,000 | 35,700 | 20,300 | 14,000 |
| 25 | 4,700 | 5,760 | 6,700 | 7,200 | 6,350 | 12,800 | 38,300 | 89,500 | 93,000 | 33,600 | 14,200 | 12,500 |
| 26 | 5,400 | 17,800 | 7,800 | 7,700 | 6,300 | 18,000 | 41,700 | 89,500 | 85,000 | 32,600 | 14,000 | 13,000 |
| 27 | 5,050 | 17,300 | 7,400 | 7,300 | 6,300 | 17,600 | 48,600 | 92,200 | 79,700 | 30,500 | 14,100 | 13,000 |
| 28 | 5,700 | 14,500 | 7,400 | 7,700 | 6,700 | 17,200 | 55,600 | 93,000 | 76,700 | 28,500 | 15,000 | 15,000 |
| 29 | 6,050 | 13,200 | 7,400 | 7,200 | ....... | 22,300 | 54,500 | 91,000 | 72,500 | 27,600 | 16,500 | 17,400 |
| 30 | 5,900 | 13,300 | 6,700 | 7,100 | ....... | 26,800 | 51,200 | 89,000 | 66,000 | 27,500 | 16,500 | 19,500 |
| 31 | 5,900 | ....... | 6,700 | 6,700 | ....... | 31,800 | ....... | 84,500 | ....... | 27,500 | 16,500 | ...... |
| 1906–7. | | | | | | | | | | | | |
| 1 | 17,800 | 8,300 | 7,720 | 7,800 | 7,900 | 14,100 | 28,600 | 29,400 | 65,600 | 86,200 | 50,000 | 21,400 |
| 2 | 16,000 | 8,000 | 6,800 | 8,800 | 8,260 | 14,200 | 27,500 | 29,400 | 61,000 | 83,600 | 47,300 | 21,200 |
| 3 | 17,500 | 8,600 | 6,700 | 8,300 | 7,850 | 14,300 | 25,700 | 29,500 | 52,300 | 93,200 | 45,900 | 24,800 |
| 4 | 16,800 | 9,470 | 6,000 | 9,100 | 7,850 | 14,400 | 25,400 | 31,600 | 52,100 | 96,000 | 42,500 | 25,800 |
| 5 | 16,600 | 8,900 | 5,500 | 9,270 | 8,300 | 15,400 | 24,400 | 32,400 | 52,000 | 95,500 | 48,600 | 25,200 |
| 6 | 15,800 | 9,200 | 6,000 | 9,600 | 10,500 | 14,400 | 22,300 | 32,400 | 52,000 | 104,000 | 47,700 | 25,600 |
| 7 | 13,500 | 9,500 | 10,100 | 9,000 | 10,200 | 16,400 | 22,500 | 31,800 | 54,000 | 102,000 | 47,600 | 25,000 |
| 8 | 12,800 | 9,500 | 23,100 | 8,560 | 9,900 | 15,800 | 21,900 | 30,900 | 65,700 | 102,000 | 46,400 | 25,000 |
| 9 | 12,100 | 10,000 | 14,500 | 8,000 | 10,500 | 14,900 | 22,000 | 30,700 | 77,300 | 104,000 | 43,000 | 23,600 |
| 10 | 11,700 | 12,800 | 13,000 | 8,000 | 10,500 | 14,600 | 23,300 | 29,000 | 89,500 | 102,000 | 44,100 | 22,000 |
| 11 | 12,000 | 12,700 | 12,600 | 7,500 | 10,500 | 17,100 | 24,100 | 27,400 | 110,000 | 102,000 | 40,000 | 20,000 |
| 12 | 12,300 | 12,500 | 12,400 | 7,410 | 10,800 | 16,200 | 24,300 | 26,900 | 112,000 | 105,000 | 36,600 | 19,600 |
| 13 | 12,000 | 12,200 | 11,700 | 7,600 | 11,000 | 16,100 | 25,200 | 27,400 | 110,000 | 100,000 | 34,200 | 19,000 |
| 14 | 12,000 | 11,300 | 11,300 | 7,600 | 10,800 | 15,600 | 25,800 | 28,600 | 106,000 | 93,400 | 31,800 | 18,200 |
| 15 | 11,700 | 10,700 | 11,300 | 8,000 | 10,800 | 15,200 | 26,800 | 28,600 | 98,500 | 87,500 | 30,000 | 16,900 |
| 16 | 11,100 | 10,600 | 10,100 | 8,500 | 10,500 | 15,400 | 30,700 | 31,800 | 100,000 | 80,000 | 29,000 | 16,200 |
| 17 | 10,800 | 10,300 | 9,100 | 9,000 | 10,600 | 14,400 | 36,000 | 33,600 | 104,000 | 71,500 | 27,200 | 15,300 |
| 18 | 10,300 | 10,200 | 9,100 | 8,950 | 11,100 | 13,800 | 40,000 | 38,700 | 96,700 | 64,200 | 25,600 | 16,000 |
| 19 | 10,200 | 9,600 | 9,000 | 8,900 | 11,700 | 14,200 | 41,800 | 42,800 | 106,000 | 64,000 | 26,000 | 16,400 |
| 20 | 9,840 | 9,200 | 9,000 | 8,700 | 12,200 | 13,200 | 43,000 | 44,400 | 105,000 | 57,200 | 24,800 | 14,800 |
| 21 | 9,800 | 9,000 | 9,000 | 8,200 | 11,400 | 13,000 | 45,600 | 44,000 | 100,000 | 56,300 | 23,000 | 13,600 |
| 22 | 9,300 | 9,200 | 8,900 | 7,900 | 11,300 | 12,600 | 44,900 | 45,600 | 104,000 | 49,500 | 22,900 | 13,900 |
| 23 | 9,200 | 9,400 | 8,300 | 8,200 | 11,600 | 14,200 | 45,000 | 48,700 | 95,000 | 47,700 | 21,700 | 13,800 |
| 24 | 8,900 | 9,430 | 7,600 | 7,900 | 14,400 | 13,800 | 44,600 | 55,000 | 102,000 | 45,300 | 23,400 | 14,400 |
| 25 | 8,500 | 9,200 | 7,000 | 7,700 | 12,900 | 13,500 | 41,500 | 70,200 | 87,500 | 44,000 | 24,600 | 14,600 |
| 26 | 8,450 | 9,200 | 6,700 | 7,700 | 12,400 | 19,000 | 37,800 | 83,500 | 87,500 | 47,800 | 25,200 | 14,900 |
| 27 | 8,200 | 9,200 | 6,400 | 7,850 | 12,000 | 22,700 | 35,100 | 102,000 | 83,800 | 50,800 | 19,200 | 14,900 |
| 28 | 8,400 | 9,500 | 6,400 | 7,500 | 15,100 | 27,400 | 33,800 | 87,300 | 82,200 | 47,600 | 18,400 | 14,700 |
| 29 | 9,400 | 9,500 | 7,160 | 7,400 | ....... | 26,800 | 31,900 | 82,000 | 81,000 | 50,800 | 17,500 | 13,000 |
| 30 | 9,400 | 8,800 | 7,400 | 6,700 | ....... | 27,800 | 30,200 | 70,400 | 82,600 | 50,300 | 21,600 | 12,700 |
| 31 | 9,400 | ....... | 7,700 | 7,300 | ....... | 29,000 | ....... | 67,500 | ....... | 50,400 | 20,600 | ...... |

NOTE.—These discharges were obtained by the indirect method for shifting channels, except from May 11 to Oct. 1, 1905, when a rating table was used.

[illegible]

[illegible] BTLS BEAL. KAA UCLAVT [illegible]

[illegible] December [illegible] and discontinued [illegible] from [illegible] from [illegible]

[illegible] The [illegible] was [illegible]

[illegible] were made from [illegible] four above [illegible] Both [illegible] are [illegible] but one channel. [illegible] and is shifting.

*Discharge measurements of Colorado River at Bulls Head, Ariz., in 1902 and 1903.*

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| 1902. | *Feet.* | *Sec.-ft.* | 1903. | *Feet.* | *Sec.-ft.* | 1903. | *Feet.* | *Sec.-ft.* |
| Dec. 5 | 3.00 | 5,459 | Jan. 27 | 2.75 | 3,651 | Mar. 25 | 3.90 | 7,976 |
| 10 | 2.65 | 4,051 | 29 | 2.60 | 3,652 | 27 | 4.00 | 8,652 |
| 13 | 2.45 | 3,222 | 30 | 2.65 | 3,465 | 30 | 4.45 | 9,403 |
| 17 | 2.95 | 4,138 | 31 | 2.65 | 3,525 | Apr. 1 | 5.10 | 11,759 |
| 20 | 3.50 | 4,792 | Feb. 4 | 3.00 | 4,289 | 3 | 5.30 | 14,457 |
| 24 | 3.23 | 4,939 | 7 | 3.35 | 4,380 | 6 | 6.10 | 17,420 |
| 29 | 2.45 | 3,366 | 10 | 3.35 | 4,924 | 10 | 6.40 | 18,991 |
| 31 | 2.20 | 2,913 | 19 | 2.70 | 3,975 | 13 | 5.30 | 14,476 |
| | | | 21 | 2.60 | 3,611 | 15 | 4.95 | 12,611 |
| 1903. | | | 25 | 3.20 | 4,582 | 17 | 5.20 | 12,975 |
| Jan. 3 | 2.20 | 2,899 | 27 | 3.15 | 4,221 | 20 | 5.20 | 13,152 |
| 5 | 2.40 | 3,416 | Mar. 4 | 3.20 | 4,991 | 22 | 5.15 | 12,308 |
| 7 | 2.20 | 2,978 | 7 | 3.15 | 5,551 | 24 | 5.30 | 15,323 |
| 14 | 2.60 | 3,415 | 9 | 3.30 | 6,274 | 30 | 6.25 | 17,266 |
| 18 | 2.85 | 3,856 | 13 | 4.00 | 8,723 | May 1 | 6.80 | 20,359 |
| 20 | 3.00 | 3,826 | 14 | 3.90 | 7,988 | 4 | 7.65 | 25,981 |
| 21 | 3.00 | 3.700 | 17 | 4.00 | 8,505 | 6 | 7.55 | 25,362 |
| 22 | 3.10 | 3,776 | 18 | 4.15 | 9,001 | 11 | 8.40 | 34,272 |
| 23 | 3.10 | 3.953 | 20 | 4.50 | 10,456 | | | |
| 24 | 3.05 | 4,164 | 23 | 4.45 | 9,329 | | | |

*Daily gage height, in feet, of Colorado River at Bulls Head, Ariz., for 1902-3.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 2.02 | | 3.60 | 5.10 | 6.85 | 16 | 2.65 | 2.50 | 2.45 | 4.00 | 4.95 | 10.00 |
| 2 | | 1.98 | 2.75 | 3.20 | 5.20 | 7.20 | 17 | 2.95 | 2.65 | 2.60 | 4.00 | 5.20 | 10.25 |
| 3 | | 2.20 | 2.90 | 3.40 | 5.30 | 7.55 | 18 | 3.24 | 2.85 | 2.60 | 4.20 | 5.30 | 10.70 |
| 4 | | 2.30 | 3.00 | 3.20 | 5.25 | 7.65 | 19 | 3.20 | 2.98 | 2.65 | 4.55 | 5.30 | |
| 5 | 3.00 | 2.40 | 3.09 | 3.20 | 6.65 | 7.70 | 20 | 3.50 | 3.00 | 2.70 | 4.50 | 5.20 | |
| 6 | 3.02 | 2.30 | 3.30 | 3.10 | 6.10 | 7.55 | 21 | 3.45 | 3.00 | 2.60 | 4.55 | | |
| 7 | 2.90 | 2.20 | 3.35 | 3.15 | 8.00 | 7.60 | 22 | 3.40 | 3.05 | 2.60 | 4.50 | 5.15 | |
| 8 | 2.78 | 2.40 | 3.35 | 3.20 | 7.50 | 7.80 | 23 | 3.38 | 3.10 | 3.00 | 4.45 | | |
| 9 | 2.72 | 2.70 | 3.38 | 3.30 | | 8.10 | 24 | 3.20 | 3.03 | 3.10 | | 5.30 | |
| 10 | 2.65 | 2.80 | 3.35 | 3.30 | 6.40 | 8.45 | 25 | 3.13 | 2.96 | 3.20 | 3.90 | 5.30 | |
| 11 | | 2.50 | 3.15 | 3.95 | 6.00 | 8.50 | 26 | 3.02 | 2.85 | 3.20 | 3.70 | | |
| 12 | 2.50 | 2.60 | 3.30 | 4.00 | 5.60 | 8.65 | 27 | 2.82 | 2.74 | 3.00 | 4.00 | 5.25 | |
| 13 | 2.45 | 2.50 | 2.50 | 3.85 | 5.30 | 8.90 | 28 | 2.72 | 2.62 | 3.15 | 4.25 | | |
| 14 | 2.50 | 2.60 | 2.40 | 3.90 | 5.10 | 9.20 | 29 | 2.48 | 2.60 | | 4.40 | 5.75 | |
| 15 | 2.64 | 2.60 | 2.40 | 4.15 | 4.95 | 9.50 | 30 | 2.35 | 2.68 | | 4.45 | 6.30 | |
| | | | | | | | 31 | 2.18 | 2.70 | | 4.65 | | |

## COLORADO RIVER AT YUMA, ARIZ.

This station, which is located in the town of Yuma, Ariz., 1½ miles below the mouth of Gila River and 10 miles by river above the Mexican border, furnishes information concerning the amount of water available for irrigation along the lower Colorado River. Records of river height have been kept by the Southern Pacific Co. since April 1, 1878.

At Laguna dam, 14 miles above the station, water is diverted for irrigation on the California side. At Yuma, below the station, water is pumped from the river for irrigation in the Yuma Valley. At the Imperial canal headworks, 6 miles below Yuma, diversions are made for use in Imperial Valley.

The records at present are furnished by the United States Reclamation Service, through the project engineer at Yuma, Ariz.

The gage is a vertical staff, in two sections, the upper section, reading above 24 feet, being the original gage established in 1876. It is located at the railroad bridge, 600 feet above the cable station. The elevation of the zero of the gage is 102.79 feet above sea level.

As the bed of the stream is composed of silt and sand and is very unstable, frequent measurements are necessary to properly determine the daily discharge. Neither bank is subject to overflow. Previous to May 31, 1903, discharge measurements were made from the railroad bridge. On that date a cable station was established at a point 600 feet below the bridge, and all measurements are now made from a car, except during highest floods, when a boat is used. At flood stages a large part of the water flows through an old channel and does not pass under the cable. At such times this overflow water is measured at the point where it passes under the railway trestle, one-third mile north of the main channel.

*Discharge measurements of Colorado River at Yuma, Ariz., 1876, 1895, 1896, 1901, 1902.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* |
| 1876. | | | |
| Mar. 15 | United States Engineers | | 7.659 |
| 1895. | | | |
| Jan. 17 | J. B. Lippincott | 20.3 | 9,737 |
| Apr. 18 | do | 20.2 | 21.094 |
| July 10 | do | 21.2 | 45.533 |
| 1896. | | | |
| May 20 | J. B. Lippincott | 22.2 | 57.903 |
| 1901. | | | |
| Aug. 18 | H. G. Heisler | 20.7 | 18.683 |
| 1902. | | | |
| Jan. 9 | J. B. Lippincott | 17.20 | 3.637 |
| Feb. 20 | S. G. Bennett | 17.15 | 3.239 |
| May 30 | do | 23.00 | 38,400 |
| July 7 | W. W. Follett | 21.06 | 18.350 |
| 9 | S. G. Bennett | 20.52 | 14.799 |
| Oct. 11 | do | 18.50 | 6.030 |
| 14 | R. P. H. Laney | 17.90 | 4,798 |
| 17 | do | 17.50 | 3,559 |
| 21 | do | 17.60 | 4,203 |
| 24 | do | 17.50 | 3,547 |
| Nov. 12 | S. G. Bennett | 17.40 | 3.614 |
| 1902. | | | |
| Nov. 13 | S. G. Bennett | 17.50 | 3,865 |
| 15 | W. D. Smith | 18.55 | 5,276 |
| 18 | do | 18.05 | 4,213 |
| 20 | do | 18.00 | 4,368 |
| 22 | do | 18.10 | 4,600 |
| 24 | do | 18.45 | 5,500 |
| 26 | do | 18.40 | 4,979 |
| 28 | do | 18.50 | 5,544 |
| Dec. 1 | do | 20.00 | 12,596 |
| 3 | do | 19.25 | 7,862 |
| 5 | do | 18.85 | 6,347 |
| 8 | do | 18.30 | 4.825 |
| 10 | do | 18.20 | 5,081 |
| 12 | do | 18.00 | 4.609 |
| 15 | do | 17.65 | 3,818 |
| 16 | do | 17.50 | 3.589 |
| 18 | do | 18.30 | 5,361 |
| 19 | do | 18.05 | 4,607 |
| 20 | do | 18.05 | 5,237 |
| 22 | do | 17.70 | 4,698 |
| 24 | do | 18.00 | 4,863 |
| 26 | do | 18.10 | 5,356 |
| 27 | do | 18.30 | 5,497 |
| 29 | do | 18.00 | 4,588 |
| 31 | do | 17.70 | 4,176 |

*Discharge measurements of Colorado River at Yuma, Ariz., in 1903.*

[By Smith, Swain, and Barnes.]

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| 1903. | *Feet.* | *Sec.-ft.* | 1903. | *Feet.* | *Sec.-ft.* | 1903. | *Feet.* | *Sec.-ft.* |
| Jan. 2 | 17.40 | 3,423 | Mar. 30 | 19.58 | 6,530 | Aug. 11 | 20.50 | 11,233 |
| 3 | 17.30 | 3,503 | 31 | 20.20 | 8,295 | 19 | 19.75 | 8,170 |
| 5 | 17.00 | 3,133 | Apr. 2 | 20.27 | 8,961 | 21 | 19.83 | 9,198 |
| 7 | 16.90 | 2,826 | 8 | 21.55 | 20,359 | Sept. 2 | 19.20 | 5,759 |
| 9 | 16.90 | 2,722 | 9 | 22.85 | 32,623 | 4 | 19.00 | 5,501 |
| 10 | 16.90 | 2,818 | 10 | 22.75 | 25,400 | 10 | 19.40 | 5,942 |
| 12 | 16.50 | 2,694 | 16 | 20.58 | 12,263 | 12 | 19.35 | 6,309 |
| 14 | 16.95 | 2,905 | 18 | 20.40 | 11,466 | 15 | 19.10 | 5,138 |
| 19 | 17.00 | 2,939 | 21 | 20.64 | 11,442 | 17 | 19.50 | 7,399 |
| 21 | 17.00 | 2,900 | 23 | 20.55 | 10,038 | 19 | 19.50 | 7,714 |
| 23 | 17.10 | 3,078 | 25 | 20.68 | 11,584 | 21 | 19.30 | 6,943 |
| 24 | 17.20 | 3,170 | 27 | 20.90 | 12,218 | 23 | 19.60 | 8,331 |
| 25 | 17.20 | 2,997 | 29 | 20.70 | 11,762 | 25 | 19.60 | 7,991 |
| 26 | 17.40 | 3,320 | May 2 | 21.60 | 17,243 | 29 | 19.70 | 7,649 |
| 27 | 17.40 | 3,266 | 4 | 21.75 | 21,177 | Oct. 2 | 20.40 | 9,352 |
| 29 | 17.50 | 3,297 | 6 | 21.90 | 22,479 | 4 | 20.70 | 11,498 |
| 31 | 17.40 | 3,382 | 9 | 22.00 | 22,771 | 6 | 21.00 | 15,806 |
| Feb. 2 | 17.20 | 2,978 | 12 | 22.55 | 27,500 | 8 | 20.35 | 9,852 |
| 3 | 17.15 | 2,847 | 15 | 23.30 | 29,760 | 10 | 19.90 | 7,906 |
| 5 | 17.20 | 2,997 | 18 | 23.80 | 34,000 | 12 | 20.10 | 8,408 |
| 6 | 17.20 | 3,179 | 21 | 24.45 | 43,160 | 14 | 20.40 | 9,916 |
| 7 | 17.25 | 3,171 | 23 | 25.20 | 48,980 | 16 | 20.00 | 8,044 |
| 9 | 17.41 | 3,512 | 25 | 25.60 | 56,401 | 19 | 19.80 | 6,745 |
| 10 | 17.55 | 3,643 | 28 | 24.65 | 48,485 | 22 | 19.70 | 6,763 |
| 11 | 17.71 | 3,906 | 31 | 23.60 | 37,925 | 25 | 19.70 | 6,396 |
| 14 | 17.98 | 4,113 | June 2 | 23.40 | 28,770 | 27 | 19.70 | 6,365 |
| 16 | 18.00 | 3,973 | 4 | 23.40 | 29,600 | 29 | 19.75 | 6,128 |
| 17 | 17.77 | 3,807 | 6 | 23.40 | 29,360 | 31 | 19.70 | 6,148 |
| 18 | 17.55 | 3,447 | 8 | 24.25 | 40,990 | Nov. 3 | 19.70 | 6,386 |
| 20 | 17.25 | 3,123 | 10 | 24.80 | 49,050 | 5 | 19.70 | 6,071 |
| 21 | 17.21 | 3,182 | 12 | 25.25 | 52,459 | 7 | 19.70 | 5,702 |
| 23 | 17.24 | 2,910 | 15 | 25.75 | 54,290 | 10 | 19.70 | 5,700 |
| 24 | 17.29 | 3,313 | 17 | 26.35 | 56,720 | 13 | 19.70 | 5,358 |
| 26 | 17.28 | 3,127 | 19 | 26.65 | 61,675 | 16 | 19.70 | 5,245 |
| 28 | 17.25 | 3,255 | 22 | 27.15 | 65,500 | 18 | 19.70 | 5,238 |
| Mar. 2 | 17.50 | 3,500 | 24 | 27.50 | 69,174 | 21 | 19.65 | 5,011 |
| 3 | 17.65 | 3,700 | 26 | 27.65 | 67,737 | 24 | 19.60 | 5,054 |
| 5 | 17.69 | 3,695 | 29 | 27.60 | 72,219 | 26 | 19.55 | 4,963 |
| 6 | 18.14 | 4,099 | July 2 | 27.25 | 66,512 | 28 | 19.40 | 4,707 |
| 7 | 19.01 | 5,791 | 5 | 26.70 | 54,216 | 30 | 19.50 | 4,944 |
| 9 | 18.68 | 4,974 | 7 | 26.05 | 51,265 | Dec. 2 | 19.70 | 5,345 |
| 10 | 18.48 | 4,695 | 9 | 25.20 | 44,430 | 5 | 19.20 | 4,479 |
| 12 | 18.26 | 4,183 | 11 | 24.45 | 41,853 | 8 | 19.42 | 4,689 |
| 13 | 18.23 | 4,097 | 13 | 23.15 | 34,096 | 10 | 19.60 | 5,056 |
| 14 | 18.35 | 4,177 | 15 | 22.70 | 30,950 | 12 | 19.65 | 5,027 |
| 16 | 19.84 | 7,146 | 17 | 22.80 | 30,219 | 14 | 19.50 | 4,908 |
| 18 | 19.73 | 6,806 | 20 | 22.40 | 28,558 | 16 | 19.36 | 4,786 |
| 20 | 19.68 | 6,284 | 22 | 22.20 | 25,956 | 18 | 19.20 | 4,370 |
| 21 | 19.63 | 6,434 | 24 | 22.90 | 30,400 | 20 | 18.85 | 3,886 |
| 23 | 20.54 | 9,408 | 27 | 22.70 | 27,120 | 22 | 18.55 | 3,627 |
| 24 | 20.28 | 8,789 | 29 | 21.80 | 22,726 | 25 | 18.35 | 3,253 |
| 26 | 20.05 | 8,682 | 31 | 21.60 | 20,350 | 28 | 18.40 | 3,410 |
| 28 | 19.84 | 7,662 | Aug. 8 | 20.80 | 13,325 | 30 | 18.90 | 3,896 |

*Discharge measurements of Colorado River at Yuma, Ariz., in 1904.*

[By W. [illegible] Smith, [illegible] Smith, and [illegible]]

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| | Feet. | Sec.-ft. | | Feet. | Sec.-ft. | | Feet. | Sec.-ft. |
| Jan. [illegible] | [illegible] | [illegible] | Apr. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | May [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Sept. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Feb. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | June [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Oct. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Mar. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Nov. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | July [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Dec. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | Aug. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Discharge measurements of Colorado River at Yuma, Ariz., in 1905.*

[By W. D. Smith and others.]

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| | *Feet.* | *Sec.-ft.* | | *Feet.* | *Sec.-ft.* | | *Feet.* | *Sec.-ft.* |
| Jan. 4 | 18.6 | 3,985 | Apr. 13 | 25.3 | 45,800 | Aug. 21 | 18.85 | 8,690 |
| 6 | 18.95 | 4,573 | 14 | 29.4 | 93,800 | 23 | 18.75 | 7,795 |
| 9 | 18.65 | 4,170 | 19 | 24.9 | 45,050 | 26 | 18.65 | 7,241 |
| 10 | 21.1 | 16,090 | 21 | 23.3 | 39,500 | 28 | 18.7 | 7,013 |
| 11 | 19.2 | 6,401 | 24 | 22.3 | 31,690 | 30 | 19.6 | 10,290 |
| 13 | 19.25 | 6,348 | 26 | 23.4 | 37,160 | Sept. 1 | 18.5 | 6,440 |
| 17 | 22.3 | 20,420 | 27 | 23.95 | 41,630 | 4 | 18.45 | 6,464 |
| 18 | 23.95 | 27,450 | 29 | 23.95 | 34,990 | 6 | 18.3 | 5,644 |
| 20 | 21.0 | 12,170 | May 1 | 25.0 | 41,520 | 9 | 18.45 | 6,051 |
| 23 | 20.2 | 7,863 | 4 | 24.25 | 37,280 | 11 | 18.95 | 7,631 |
| 25 | 19.8 | 7,055 | 6 | 24.55 | 37,410 | 13 | 18.85 | 7,706 |
| 28 | 19.55 | 5,727 | 8 | 25.1 | 40,050 | 14 | 19.4 | 9,667 |
| 31 | 19.3 | 5,278 | 10 | 26.1 | 49,200 | 16 | 18.8 | 7,700 |
| Feb. 2 | 19.6 | 6,054 | 13 | 25.4 | 38,840 | 18 | 18.6 | 6,743 |
| 4 | 19.7 | 6,632 | 16 | 25.0 | 37,320 | 20 | 18.7 | 7,131 |
| 6 | 21.4 | 16,600 | 18 | 24.7 | 33,910 | 23 | 18.45 | 6,063 |
| 8 | 28.0 | 67,730 | 20 | 24.3 | 34,580 | 26 | 18.2 | 5,260 |
| 9 | 28.75 | 82,820 | 23 | 24.9 | 38,390 | 29 | 18.0 | 5,287 |
| 10 | 26.2 | 39,580 | 26 | 25.8 | 45,300 | Oct. 2 | 18.0 | 5,222 |
| 11 | 24.1 | 32,120 | 29 | 26.8 | 54,810 | 4 | 18.05 | 7,172 |
| 16 | 21.5 | 18,610 | 31 | 27.4 | 59,020 | 6 | 18.8 | 7,295 |
| 18 | 21.4 | 16,490 | June 3 | 28.0 | 68,160 | 7 | 20.1 | 13,080 |
| 20 | 25.1 | 47,000 | 6 | 28.45 | 67,600 | 10 | 20.3 | 14,060 |
| 22 | 25.8 | 54,730 | 8 | 28.3 | 72,930 | 13 | 19.7 | 10,660 |
| 23 | 23.7 | 32,990 | 12 | 28.25 | 72,590 | 16 | 19.1 | 8,290 |
| 24 | 22.05 | 21,990 | 14 | 28.7 | 82,020 | 19 | 18.7 | 6,779 |
| 25 | 21.5 | 18,860 | 19 | 29.15 | 94,320 | 23 | 18.6 | 6,025 |
| 27 | 23.45 | 27,730 | 22 | 29.1 | 92,400 | 27 | 18.4 | 5,507 |
| Mar. 1 | 23.95 | 29,070 | 26 | 28.55 | 77,610 | 31 | 18.4 | 5,579 |
| 2 | 24.9 | 39,260 | 29 | 27.6 | 64,370 | Nov. 3 | 18.5 | 5,812 |
| 3 | 26.7 | 70,170 | July 3 | 25.9 | 50,640 | 6 | 18.35 | 5,709 |
| 6 | 24.8 | 44,310 | 5 | 25.45 | 44,950 | 9 | 18.75 | 6,632 |
| 9 | 24.1 | 36,400 | 10 | 23.35 | 32,980 | 13 | 18.75 | 6,308 |
| 11 | 24.2 | 38,625 | 13 | 22.05 | 30,870 | 16 | 18.85 | 6,787 |
| 13 | 24.45 | 38,870 | 15 | 21.9 | 27,710 | 23 | 18.8 | 6,495 |
| 15 | 24.0 | 36,720 | 18 | 21.75 | 25,300 | 27 | 19.0 | 6,652 |
| 16 | 26.1 | 60,640 | 19 | 21.3 | 22,320 | 30 | 31.3 | 102,700 |
| 17 | 27.35 | 65,820 | 21 | 20.9 | 22,000 | Dec. 1 | 28.78 | 77,360 |
| 19 | 28.0 | 73,440 | 24 | 20.5 | 20,800 | 2 | 23.5 | 37,160 |
| 20 | 30.25 | 110,800 | 26 | 20.35 | 20,460 | 5 | 21.3 | 28,650 |
| 22 | 28.9 | 91,200 | 28 | 20.05 | 18,910 | 8 | 19.5 | 16,970 |
| 23 | 27.75 | 76,930 | 31 | 19.95 | 16,750 | 11 | 18.75 | 12,620 |
| 24 | 25.6 | 58,600 | Aug. 2 | 19.9 | 15,790 | 14 | 18.3 | 9,613 |
| 25 | 24.1 | 43,050 | 4 | 19.8 | 13,560 | 16 | 18.2 | 8,795 |
| 27 | 23.1 | 31,020 | 7 | 20.2 | 15,940 | 18 | 17.95 | 7,807 |
| 30 | 22.0 | 24,390 | 9 | 20.3 | 16,770 | 21 | 17.85 | 7,670 |
| Apr. 1 | 21.5 | 20,690 | 11 | 20.4 | 16,960 | 26 | 17.95 | 7,502 |
| 3 | 21.3 | 19,480 | 14 | 20.1 | 15,960 | 30 | 17.8 | 5,981 |
| 5 | 21.6 | 21,000 | 16 | 19.6 | 13,800 | | | |
| 7 | 22.5 | 29,840 | 19 | 19.1 | 9,757 | | | |

*Discharge measurements of [illegible] in 1906.*

By [illegible].

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| | *Feet.* | *Sec.-ft.* | | *Feet.* | *Sec.-ft.* | | *Feet.* | *Sec.-ft.* |
| 1906. [illegible] | [illegible] | [illegible] | May 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | June [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | July [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Mar. [illegible] | [illegible] | [illegible] | 9 | [illegible] | [illegible] | Nov. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 22,[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | Aug. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 4 | 20.0 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 7 | 19.7 | [illegible] | [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | [illegible] | [illegible] | 9 | 19.3 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 11 | [illegible] | [illegible] | Dec. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 13 | 19.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | 15 | 19.2 | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | 18 | 19.1 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 20 | 19.25 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 10 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 24 | 19.2 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 25 | [illegible] | [illegible] | 12 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 27 | 19.1 | [illegible] | 15 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 19.5 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 18.9 | [illegible] | [illegible] | [illegible] | [illegible] |
| May [illegible] | [illegible] | [illegible] | Sept. 3 | 19.2 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 7 | 18.7 | 12,000 | [illegible] | [illegible] | [illegible] |
| 10 | 23.7 | [illegible] | 10 | 18.75 | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | 42,100 | 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | 15 | [illegible] | 10,700 | | | |

*Discharge measurements of Colorado River at Yuma, Ariz., in 1907 and 1908.*

[By Robertson, North, Dyer, and Priest.]

| Date. | Gage height. | Discharge. |
|---|---|---|
| 1907. | *Feet.* | *Sec.-ft.* |
| Jan. 1 | 22.75 | 36,600 |
| 3 | 20.85 | 24,700 |
| 5 | 20.6 | 18,800 |
| 7 | 20.2 | 15,200 |
| 9 | 20.0 | 15,900 |
| 11 | 20.7 | 18,200 |
| 14 | 22.0 | 29,700 |
| 16 | 20.5 | 20,400 |
| 18 | 19.8 | 16,300 |
| 21 | 21.7 | 27,300 |
| 23 | 20.6 | 22,100 |
| 25 | 20.15 | 15,900 |
| 28 | 19.7 | 13,200 |
| 30 | 19.6 | 12,700 |
| Feb. 2 | 22.05 | 29,500 |
| 4 | 21.6 | 27,100 |
| 6 | 20.6 | 18,800 |
| 8 | 20.4 | 17,900 |
| 11 | 20.9 | 20,300 |
| 13 | 20.6 | 17,400 |
| 16 | 20.5 | 16,600 |
| 18 | 20.4 | 14,900 |
| 20 | 20.2 | 14,100 |
| 23 | 21.0 | 17,400 |
| 25 | 20.7 | 15,000 |
| 28 | 21.9 | 22,900 |
| Mar. 2 | 20.75 | 16,700 |
| 5 | 21.0 | 18,000 |
| 9 | 24.65 | 46,200 |
| 11 | 22.2 | 26,500 |
| 13 | 21.75 | 24,900 |
| 16 | 21.2 | 19,700 |
| 18 | 20.8 | 16,900 |
| 20 | 20.4 | 14,800 |
| 25 | 22.0 | 26,200 |
| 27 | 21.5 | 20,200 |
| 30 | 23.0 | 31,200 |
| Apr. 1 | 22.8 | 29,000 |
| 3 | 23.2 | 32,100 |
| 6 | 22.7 | 29,200 |
| 8 | 22.4 | 27,400 |
| 10 | 22.2 | 24,700 |
| 13 | 22.45 | 25,900 |
| 15 | 22.5 | 26,000 |
| 17 | 23.0 | 29,500 |
| 20 | 24.8 | 41,500 |
| 22 | 25.55 | 46,900 |
| 24 | 25.8 | 49,900 |
| 27 | 25.6 | 45,700 |
| 29 | 24.7 | 44,600 |
| May 1 | 23.75 | 35,500 |
| 4 | 23.2 | 32,400 |
| 6 | 23.1 | 33,000 |
| 8 | 23.3 | 33,900 |
| 11 | 23.2 | 32,800 |
| 13 | 22.8 | 30,400 |
| 15 | 22.65 | 29,100 |
| 18 | 22.8 | 28,600 |
| 20 | 23.5 | 31,900 |
| 22 | 24.4 | 37,500 |
| 25 | 24.7 | 41,300 |
| 27 | 25.55 | 51,000 |
| 29 | 27.0 | 61,800 |
| June 1 | 28.4 | 72,400 |
| 3 | 29.1 | 77,000 |
| 6 | 28.95 | 87,100 |
| 8 | 27.75 | 80,100 |
| 10 | 26.9 | 72,200 |
| 12 | 27.1 | 81,800 |
| 15 | 28.05 | 94,400 |
| 17 | 28.55 | 101,000 |
| 19 | 29.15 | 106,000 |
| 22 | 29.05 | 108,000 |
| 24 | 28.9 | 112,000 |
| 26 | 28.9 | 114,000 |
| 29 | 28.6 | 115,000 |
| July 1 | 28.3 | 113,000 |
| 6 | 27.4 | 107,000 |

| Date. | Gage height. | Discharge. |
|---|---|---|
| 1907. | *Feet.* | *Sec.-ft.* |
| July 8 | 27.5 | 108,000 |
| 10 | 27.8 | 110,000 |
| 15 | 27.8 | 114,000 |
| 17 | 27.5 | 110,000 |
| 20 | 26.75 | 102,000 |
| 22 | 25.65 | 92,000 |
| 24 | 24.8 | 82,400 |
| 29 | 23.1 | 58,600 |
| 31 | 22.8 | 55,400 |
| Aug. 3 | 23.3 | 61,900 |
| 5 | 22.85 | 55,300 |
| 7 | 22.45 | 50,600 |
| 10 | 22.15 | 49,900 |
| 12 | 21.45 | 41,300 |
| 14 | 20.95 | 33,900 |
| 17 | 20.45 | 32,900 |
| 19 | 20.25 | 28,600 |
| 22 | 20.25 | 26,800 |
| 24 | 19.95 | 24,500 |
| 26 | 20.5 | 27,300 |
| 29 | 20.3 | 25,000 |
| 31 | 19.6 | 23,100 |
| Sept. 2 | 22.25 | 43,300 |
| 4 | 21.25 | 35,000 |
| 7 | 21.25 | 34,500 |
| 9 | 20.75 | 31,900 |
| 11 | 20.5 | 27,600 |
| 14 | 19.65 | 21,900 |
| 16 | 19.2 | 18,400 |
| 21 | 19.0 | 15,500 |
| 23 | 19.0 | 14,100 |
| 25 | 19.0 | 13,400 |
| 28 | 19.1 | 13,400 |
| Oct. 1 | 18.9 | 12,000 |
| 3 | 18.8 | 11,300 |
| 5 | 18.7 | 10,300 |
| 8 | 18.75 | 10,300 |
| 10 | 19.1 | 12,200 |
| 12 | 19.7 | 15,900 |
| 14 | 19.75 | 15,500 |
| 17 | 19.6 | 14,000 |
| 19 | 19.5 | 13,800 |
| 21 | 19.55 | 14,600 |
| 23 | 19.95 | 15,900 |
| 26 | 19.5 | 14,200 |
| 28 | 20.25 | 18,800 |
| 30 | 19.9 | 16,300 |
| Nov. 2 | 19.55 | 14,300 |
| 4 | 19.4 | 12,900 |
| 6 | 19.3 | 11,900 |
| 9 | 19.1 | 11,800 |
| 12 | 19.1 | 10,900 |
| 14 | 19.1 | 10,700 |
| 18 | 18.8 | 9,600 |
| 20 | 18.8 | 9,900 |
| 23 | 18.8 | 9,600 |
| 26 | 18.7 | 9,100 |
| 29 | 18.7 | 9,000 |
| Dec. 2 | 18.5 | 8,600 |
| 5 | 18.3 | 7,800 |
| 7 | 18.3 | 8,000 |
| 9 | 18.3 | 7,500 |
| 12 | 18.3 | 7,900 |
| 14 | 18.5 | 7,700 |
| 16 | 18.45 | 7,300 |
| 18 | 18.4 | 7,300 |
| 21 | 18.4 | 7,400 |
| 24 | 18.35 | 7,500 |
| 28 | 18.15 | 6,300 |
| 30 | 18.1 | 6,000 |
| 1908. | | |
| Jan. 2 | 18.0 | 5,800 |
| 5 | 18.2 | 6,400 |
| 8 | 18.6 | 7,400 |
| 11 | 18.4 | 6,900 |
| 13 | 18.3 | 6,700 |
| 16 | 18.2 | 5,900 |

| Date. | Gage height. | Discharge. |
|---|---|---|
| 1908. | *Feet.* | *Sec.-ft.* |
| Jan. 18 | 18.1 | 5,600 |
| 20 | 18.1 | 5,600 |
| 27 | 18.4 | 6,300 |
| 30 | 18.4 | 6,100 |
| Feb. 5 | 18.7 | 7,400 |
| 7 | 23.95 | 45,000 |
| 11 | 19.7 | 14,200 |
| 14 | 20.0 | 14,900 |
| 19 | 19.7 | 12,900 |
| 21 | 19.9 | 10,600 |
| 24 | 19.7 | 9,900 |
| 26 | 20.65 | 16,900 |
| Mar. 3 | 20.25 | 11,700 |
| 9 | 22.2 | 27,000 |
| 11 | 21.1 | 18,700 |
| 12 | 21.9 | 24,700 |
| 14 | 20.6 | 15,200 |
| 17 | 20.05 | 13,400 |
| 19 | 19.85 | 11,300 |
| 23 | 20.2 | 13,200 |
| 25 | 20.45 | 14,300 |
| 28 | 20.95 | 17,200 |
| 31 | 20.8 | 16,100 |
| Apr. 2 | 20.8 | 16,400 |
| 6 | 20.4 | 13,900 |
| 9 | 20.2 | 13,400 |
| 17 | 20.6 | 13,600 |
| 22 | 21.1 | 16,500 |
| 25 | 22.0 | 27,100 |
| 27 | 21.95 | 26,000 |
| 29 | 22.05 | 28,100 |
| May 2 | 22.7 | 29,800 |
| 5 | 22.0 | 27,100 |
| 9 | 21.4 | 23,100 |
| 13 | 21.65 | 25,100 |
| 16 | 21.55 | 23,500 |
| 18 | 22.2 | 27,900 |
| 22 | 22.3 | 27,500 |
| 26 | 22.15 | 25,500 |
| 31 | 22.8 | 31,300 |
| June 5 | 22.6 | 30,900 |
| 8 | 22.4 | 33,600 |
| 12 | 23.3 | 35,200 |
| 15 | 23.3 | 38,700 |
| 17 | 23.3 | 39,400 |
| 19 | 24.35 | 48,300 |
| 22 | 24.95 | 55,100 |
| 24 | 25.25 | 59,700 |
| 26 | 25.35 | 61,700 |
| 29 | 24.6 | 55,400 |
| July 1 | 24.5 | 53,800 |
| 4 | 24.2 | 53,100 |
| 6 | 23.8 | 49,300 |
| 8 | 23.05 | 41,100 |
| 10 | 22.3 | 35,400 |
| 13 | 21.9 | 31,200 |
| 15 | 21.5 | 29,800 |
| 17 | 21.2 | 28,800 |
| 20 | 21.0 | 25,600 |
| 22 | 20.7 | 24,600 |
| 24 | 20.7 | 24,100 |
| 27 | 20.55 | 21,600 |
| 29 | 20.1 | 19,300 |
| 31 | 20.2 | 18,900 |
| Aug. 3 | 20.85 | 22,700 |
| 5 | 20.7 | 21,400 |
| 7 | 21.1 | 25,200 |
| 10 | 22.05 | 31,900 |
| 12 | 21.8 | 28,200 |
| 14 | 21.05 | 24,000 |
| 17 | 20.6 | 20,700 |
| 19 | 20.4 | 20,500 |
| 21 | 20.45 | 19,300 |
| 24 | 22.4 | 33,800 |
| 26 | 22.1 | 28,200 |
| 28 | 21.6 | 25,000 |
| 31 | 20.65 | 18,900 |
| Sept. 2 | 20.4 | 19,200 |

[illegible]

| Date | Gage height | Discharge | Date | Gage height | Discharge | Date | Gage height | Discharge |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Jan. [illegible] | [illegible] | [illegible] |

[illegible]

| Date | Gage height | Discharge | Date | Gage height | Discharge | Date | Gage height | Discharge |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | | | | | *Feet.* | *Sec.-ft.* |
| [illegible] | [illegible] | [illegible] | May [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | June [illegible] | [illegible] | [illegible] | Oct. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | 16.5 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 5 | 16.5 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16.4 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | 16.4 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | 16.4 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22 | 16.4 | [illegible] |
| [illegible] | [illegible] | [illegible] | July [illegible] | [illegible] | 30,100 | 23 | 16.4 | 12,[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25 | 16.3 | 12,[illegible] |
| Mar. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | 16.3 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Nov. [illegible] | 16.0 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | 15.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 6 | 15.8 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 32,600 | 9 | 15.8 | [illegible] |
| [illegible] | [illegible] | [illegible] | 22 | 20.1 | 42,400 | 11 | 15.8 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 13 | 15.8 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 34,400 | 16 | 15.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 40,400 | 18 | 15.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 31,400 | 20 | 15.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | Aug. [illegible] | [illegible] | 44,100 | 23 | 15.9 | [illegible] |
| Apr. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 27 | 16.0 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 15.85 | [illegible] |
| [illegible] | [illegible] | [illegible] | 10 | [illegible] | [illegible] | Dec. 2 | 15.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | 12 | [illegible] | 30,400 | 4 | 16.0 | 9,[illegible] |
| [illegible] | 21.2 | 21,[illegible] | 14 | [illegible] | 25,500 | 7 | 16.1 | 10,[illegible] |
| [illegible] | [illegible] | [illegible] | 17 | [illegible] | 42,700 | 9 | 16.1 | [illegible] |
| [illegible] | 21.[illegible] | [illegible] | 19 | 19.8 | 42,300 | 11 | 16.0 | [illegible] |
| 17 | [illegible] | [illegible] | 21 | 19.7 | 39,100 | 14 | 16.0 | 10,300 |
| 20 | 21.3 | 22,[illegible] | 24 | 20.35 | 53,400 | 16 | 15.7 | 9,300 |
| 22 | 21.2 | 21,[illegible] | 26 | 21.2 | 50,600 | 18 | 15.35 | 7,[illegible] |
| 24 | 22.[illegible] | [illegible] | 28 | 20.2 | 47,300 | 21 | 15.1 | 6,[illegible] |
| 26 | 24.2 | [illegible] | 31 | 19.8 | 42,400 | 23 | 15.2 | 6,[illegible] |
| 28 | 24.[illegible] | [illegible] | Sept. 2 | 19.45 | 39,000 | 25 | 15.3 | 6,[illegible] |
| 30 | 23.[illegible] | [illegible] | 4 | 21.1 | 65,200 | 28 | 15.0 | 5,[illegible] |
| May 3 | 22.7 | [illegible] | 7 | 20.8 | 50,400 | 30 | 14.8 | 4,800 |
| 5 | 23.2 | [illegible] | 11 | 22.3 | 76,000 | | | |
| 7 | 24.4 | [illegible] | 15 | 22.5 | 79,900 | | | |

*Discharge measurements of Colorado River at Yuma, Ariz., in 1910.*

[By Conway, Tompkins, and North.]

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| | *Feet.* | *Sec.-ft.* | | *Feet.* | *Sec.-ft.* | | *Feet.* | *Sec.-ft.* |
| Jan. 1 | 14.65 | 4,400 | May 3 | 21.5 | 49,200 | Aug. 20 | 15.8 | 9,400 |
| 4 | 20.7 | 48,700 | 5 | 22.0 | 54,900 | 23 | 15.4 | 7,800 |
| 6 | 19.7 | 38,400 | 7 | 22.7 | 65,300 | 25 | 15.5 | 7,800 |
| 8 | 17.3 | 21,200 | 10 | 22.9 | 70,900 | 27 | 15.5 | 7,800 |
| 11 | 16.9 | 19,300 | 10 | 22.9 | 63,600 | 31 | 15.15 | 6,500 |
| 13 | 15.8 | 13,400 | 12 | 22.1 | 61,600 | Sept. 3 | 15.0 | 5,500 |
| 15 | 15.0 | 10,000 | 12 | 22.1 | 55,900 | 6 | 14.9 | 4,800 |
| 18 | 15.0 | 9,100 | 14 | 21.5 | 50,400 | 8 | 14.9 | 4,800 |
| 20 | 15.5 | 12,300 | 17 | 21.6 | 53,100 | 10 | 15.3 | 5,300 |
| 22 | 16.2 | 15,200 | 19 | 22.0 | 60,100 | 13 | 14.7 | 4,900 |
| 25 | 16.4 | 15,500 | 24 | 23.0 | 70,300 | 15 | 15.8 | 8,000 |
| 29 | 15.8 | 12,600 | 26 | 21.95 | 57,500 | 17 | 15.6 | 7,100 |
| Feb. 1 | 15.4 | 10,600 | 26 | 21.95 | 61,600 | 20 | 15.2 | 6,100 |
| 3 | 15.6 | 10,200 | 28 | 21.0 | 48,400 | 22 | 15.5 | 6,900 |
| 5 | 15.8 | 10,300 | 31 | 20.1 | 42,100 | 24 | 15.5 | 6,200 |
| 8 | 15.8 | 9,500 | 31 | 20.1 | 44,400 | 27 | 15.2 | 5,600 |
| 10 | 15.8 | 9,300 | June 2 | 19.9 | 40,100 | 29 | 15.8 | 7,600 |
| 14 | 15.9 | 8,800 | 4 | 20.0 | 41,900 | Oct. 1 | 15.6 | 6,500 |
| 17 | 15.9 | 8,700 | 7 | 21.8 | 56,200 | 4 | 15.8 | 8,200 |
| 19 | 15.7 | 8,100 | 11 | 23.2 | 67,100 | 8 | 15.3 | 5,900 |
| 21 | 15.8 | 8,400 | 14 | 23.2 | 69,100 | 10 | 15.5 | 5,700 |
| 24 | 15.8 | 8,400 | 16 | 22.15 | 57,000 | 15 | 15.5 | 5,600 |
| 26 | 16.0 | 8,200 | 18 | 21.25 | 48,100 | 18 | 15.4 | 5,400 |
| Mar. 1 | 15.9 | 8,200 | 21 | 20.35 | 40,500 | 22 | 16.0 | 6,100 |
| 3 | 15.9 | 7,600 | 23 | 19.95 | 35,200 | 24 | 16.7 | 10,400 |
| 5 | 16.3 | 8,700 | 25 | 19.4 | 32,200 | 27 | 16.4 | 11,900 |
| 8 | 17.0 | 13,700 | 28 | 18.75 | 28,700 | 29 | 16.4 | 10,600 |
| 10 | 17.6 | 20,000 | 30 | 18.35 | 26,900 | Nov. 1 | 16.2 | 8,710 |
| 12 | 18.2 | 24,000 | July 2 | 18.05 | 23,500 | 3 | 16.25 | 8,470 |
| 15 | 20.4 | 40,600 | 5 | 17.8 | 21,100 | 5 | 16.4 | 8,970 |
| 17 | 19.9 | 36,100 | 7 | 18.3 | 23,900 | 8 | 16.2 | 8,040 |
| 19 | 18.9 | 29,500 | 9 | 17.4 | 19,300 | 10 | 16.2 | 7,160 |
| 22 | 18.3 | 26,500 | 12 | 16.95 | 16,800 | 12 | 16.2 | 7,450 |
| 24 | 18.2 | 25,000 | 14 | 16.5 | 14,300 | 15 | 16.5 | 8,410 |
| 26 | 18.4 | 26,000 | 16 | 16.6 | 15,100 | 19 | 16.3 | 7,840 |
| 29 | 19.3 | 33,800 | 19 | 16.1 | 12,100 | 22 | 16.4 | 8,210 |
| 31 | 20.1 | 38,800 | 21 | 16.1 | 10,600 | 26 | 16.8 | 8,890 |
| Apr. 2 | 20.1 | 36,400 | 23 | 16.0 | 9,800 | 30 | 16.3 | 7,790 |
| 5 | 19.15 | 30,200 | 26 | 16.0 | 10,000 | Dec. 3 | 16.3 | 7,260 |
| 7 | 18.6 | 27,300 | 28 | 15.7 | 7,600 | 6 | 16.0 | 6,520 |
| 9 | 18.3 | 24,100 | 30 | 15.7 | 7,700 | 8 | 16.3 | 7,310 |
| 12 | 18.5 | 23,500 | Aug. 1 | 15.9 | 8,300 | 10 | 16.4 | 6,610 |
| 14 | 18.1 | 22,000 | 4 | 16.3 | 10,100 | 13 | 16.2 | 6,980 |
| 16 | 18.1 | 22,400 | 6 | 16.6 | 11,600 | 15 | 16.2 | 7,170 |
| 19 | 18.7 | 24,900 | 9 | 16.1 | 11,100 | 17 | 16.2 | 6,920 |
| 23 | 19.2 | 30,500 | 11 | 16.2 | 12,700 | 20 | 16.0 | 6,440 |
| 26 | 19.1 | 30,100 | 13 | 16.4 | 13,200 | 24 | 16.2 | 7,150 |
| 28 | 19.9 | 33,800 | 16 | 15.8 | 10,300 | 28 | 16.3 | 6,860 |
| 30 | 20.3 | 38,500 | 18 | 16.0 | 10,500 | 31 | 16.0 | 5,560 |

## Discharge measurements of Colorado River at Yuma, Ariz., in 1911.

By [illegible]

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| | *Feet.* | *Sec.-ft.* | | *Feet.* | *Sec.-ft.* | | *Feet.* | *Sec.-ft.* |
| Jan. [illegible] | [illegible] | [illegible] | May [illegible] | [illegible] | [illegible] | Sept. 16 | 16.55 | 7,300 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19 | 16.35 | 6,6[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22 | 17.6 | 10,[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | 16.8 | 8,300 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25 | 16.6 | 7,500 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2[illegible] | 15.0 | 1[illegible],200 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2[illegible] | 16.5 | 8,700 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Oct. 3 | 16.6 | 8,[illegible] |
| [illegible] | [illegible] | [illegible] | June [illegible] | [illegible] | [illegible] | 5 | 18.65 | 22,[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.06 | 37,[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.55 | 40,[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 12 | 22.8 | 49,400 |
| Feb. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 14 | 24.0 | 59,[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20.1 | 34,700 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19 | 18.95 | 26,[illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | 18.15 | 22,3[illegible] |
| [illegible] | [illegible] | [illegible] | July [illegible] | [illegible] | [illegible] | 24 | 17.3 | 18,200 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 26 | 17.1 | 15,600 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | 17.1 | 15,200 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 31 | 17.05 | 14,400 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Nov. 2 | 17.1 | 13,200 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | 18.1 | 18,300 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 7 | 17.65 | 15,100 |
| Mar. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 9 | 17.2 | 13,300 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 11 | 17.1 | 12,700 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 14 | 17.0 | 11,600 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16 | 16.9 | 11,100 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 18 | 16.9 | 10,900 |
| [illegible] | [illegible] | [illegible] | Aug. [illegible] | [illegible] | [illegible] | 21 | 17.0 | 10,700 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | 17.0 | 9,400 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25 | 16.9 | 9,300 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | 17.0 | 9,600 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 17.0 | 9,500 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Dec. 2 | 17.1 | 10,100 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 5 | 17.15 | 10,000 |
| Apr. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 7 | 17.0 | 8,300 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 9 | 16.85 | 7,700 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 12 | 16.2 | 5,900 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 14 | 16.15 | 5,800 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16 | 16.65 | 6,900 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19 | 17.2 | 8,000 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | 17.0 | 7,700 |
| [illegible] | [illegible] | [illegible] | Sept. [illegible] | [illegible] | [illegible] | 23 | 16.8 | 7,600 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 26 | 16.65 | 6,900 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | 16.7 | 6,900 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 29 | 16.7 | 6,900 |
| May [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 16.7 | 6,900 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | |

*Discharge measurements of Colorado River at Yuma, Ariz., in 1912.*

[By B. R. Cloyd.]

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| 1912. | *Feet.* | *Sec.-ft.* | 1912. | *Feet.* | *Sec.-ft.* | 1912. | *Feet.* | *Sec.-ft.* |
| Jan. 2 | 16.50 | 6,000 | Mar. 2 | 17.50 | 7,700 | May 2 | 18.70 | 15,600 |
| 4 | 16.00 | 5,100 | 5 | 17.60 | 7,000 | 4 | 19.50 | 21,500 |
| 6 | 15.70 | 4,400 | 7 | 17.50 | 7,000 | 7 | 19.80 | 23,300 |
| 9 | 15.60 | 4,500 | 9 | 17.50 | 7,100 | 9 | 21.45 | 36,100 |
| 11 | 15.25 | 3,600 | 12 | 17.80 | 7,900 | 11 | 21.50 | 35,800 |
| 13 | 15.00 | 3,400 | 14 | 18.45 | 15,100 | 14 | 21.00 | 32,600 |
| 16 | 15.20 | 3,500 | 16 | 19.55 | 23,400 | 16 | 21.75 | 39,300 |
| 18 | 15.40 | 3,600 | 19 | 18.40 | 17,000 | 18 | 22.10 | 41,100 |
| 20 | 16.05 | 4,600 | 21 | 18.10 | 14,400 | 21 | 22.65 | 47,200 |
| 23 | 16.80 | 6,100 | 23 | 18.20 | 15,300 | 23 | 22.50 | 46,000 |
| 25 | 17.20 | 7,200 | 26 | 18.00 | 14,100 | 25 | 23.15 | 53,400 |
| 27 | 17.60 | 8,000 | 28 | 19.90 | 24,800 | 28 | 24.30 | 62,200 |
| 30 | 17.40 | 7,600 | 30 | 19.10 | 20,700 | 30 | 25.00 | 68,800 |
| Feb. 1 | 17.45 | 7,700 | Apr. 1 | 18.50 | 17,500 | June 1 | 25.60 | 80,200 |
| 3 | 17.40 | 7,500 | 4 | 18.20 | 14,700 | 4 | 27.00 | 90,800 |
| 6 | 17.10 | 7,200 | 6 | 18.00 | 14,600 | 6 | 28.00 | 112,500 |
| 8 | 17.10 | 7,400 | 9 | 18.40 | 15,300 | 8 | 28.40 | 120,700 |
| 10 | 17.10 | 7,300 | 11 | 18.70 | 17,800 | 11 | 28.30 | 117,100 |
| 13 | 17.10 | 7,000 | 13 | 19.80 | 23,200 | 13 | 28.00 | 120,600 |
| 15 | 17.20 | 7,200 | 16 | 21.00 | 32,400 | 15 | 28.00 | 116,500 |
| 17 | 17.10 | 6,700 | 18 | 21.35 | 34,200 | 18 | 28.45 | 129,800 |
| 20 | 17.40 | 7,200 | 20 | 20.60 | 28,600 | 20 | 28.90 | 140,800 |
| 22 | 17.40 | 8,000 | 23 | 19.50 | 21,900 | 25 | 25.55 | 89,800 |
| 24 | 17.40 | 7,600 | 25 | 19.25 | 20,300 | 27 | 23.60 | 70,700 |
| 25 | 17.30 | 7,400 | 27 | 19.10 | 19,100 | 29 | 22.70 | 58,100 |
| 29 | 17.50 | 7,800 | 30 | 18.70 | 16,000 | | | |

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for 1891–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1891. | | | | | | | | | |
| 1 | 17.58 | 16.58 | 23.83 | 20.50 | 20.83 | 22.25 | 22.67 | 19.08 | 18.50 |
| 2 | 17.75 | 16.69 | 22.17 | 19.00 | 21.67 | 21.92 | 22.67 | 19.00 | 18.25 |
| 3 | 18.50 | 16.75 | 21.75 | 18.83 | 21.50 | 22.00 | 22.50 | 19.50 | 18.00 |
| 4 | 18.92 | 16.83 | 20.83 | 18.75 | 21.67 | 21.92 | 22.25 | 19.25 | 17.92 |
| 5 | 18.17 | 16.75 | 20.25 | 18.67 | 21.83 | 21.92 | 22.17 | 19.67 | 17.83 |
| 6 | 17.92 | 16.75 | 20.00 | 18.58 | 22.25 | 22.08 | 21.92 | 20.08 | 17.83 |
| 7 | 17.83 | 16.75 | 19.58 | 18.25 | 22.67 | 22.50 | 21.83 | 22.17 | 17.67 |
| 8 | 17.75 | 16.83 | 19.25 | 18.00 | 22.83 | 22.58 | 21.67 | 20.25 | 17.58 |
| 9 | 17.75 | 16.83 | 18.92 | 18.00 | 22.83 | 22.33 | 21.33 | 19.67 | 17.50 |
| 10 | 17.67 | 16.83 | 18.75 | 17.92 | 22.92 | 22.00 | 21.33 | 19.42 | 17.42 |
| 11 | 17.75 | 16.83 | 18.83 | 17.92 | 23.00 | 21.75 | 21.17 | 19.33 | 17.33 |
| 12 | 18.50 | 16.83 | 19.17 | 17.83 | 23.17 | 21.50 | 21.00 | 19.33 | 17.25 |
| 13 | 17.92 | 16.92 | 18.42 | 17.83 | 23.25 | 21.33 | 21.00 | 19.00 | 17.25 |
| 14 | 17.92 | 16.75 | 18.00 | 17.92 | 23.58 | 21.25 | 21.00 | 18.75 | 17.17 |
| 15 | 17.83 | 16.67 | 19.75 | 18.17 | 24.17 | 21.67 | 21.00 | 18.58 | 17.00 |
| 16 | 17.83 | 16.75 | 19.50 | 18.75 | 24.83 | 22.25 | 20.92 | 18.50 | 16.92 |
| 17 | 17.83 | 16.75 | 19.33 | 18.67 | 25.00 | 22.83 | 20.83 | 18.33 | 16.83 |
| 18 | 17.75 | 16.83 | 19.00 | 18.50 | 24.83 | 23.00 | 20.75 | 18.33 | 16.67 |
| 19 | 17.67 | 17.92 | 19.00 | 18.25 | 24.50 | 23.25 | 20.67 | 18.33 | 16.67 |
| 20 | 17.50 | 18.33 | 19.42 | 18.50 | 23.92 | 23.32 | 20.42 | 18.67 | 16.58 |
| 21 | 17.42 | 20.00 | 19.33 | 19.33 | 23.67 | 23.33 | 20.42 | 18.50 | 16.50 |
| 22 | 17.33 | 21.33 | 19.75 | 19.08 | 23.50 | 22.83 | 20.33 | 18.50 | 16.42 |
| 23 | 17.33 | 28.50 | 19.50 | 20.33 | 23.17 | 22.50 | 20.17 | 18.25 | 16.42 |
| 24 | 17.25 | 25.00 | 19.75 | 20.00 | 22.67 | 22.25 | 20.08 | 18.17 | 16.50 |
| 25 | 17.17 | 25.50 | 18.00 | 20.00 | 22.42 | 22.33 | 20.00 | 17.92 | 17.58 |
| 26 | 17.17 | 27.17 | 18.50 | 20.50 | 22.42 | 22.50 | 19.83 | 17.92 | 16.58 |
| 27 | 17.00 | 32.00 | 19.17 | 20.50 | 22.58 | 22.67 | 19.67 | 17.92 | 16.50 |
| 28 | 16.75 | 28.17 | 19.17 | 20.00 | 22.67 | 22.67 | 19.42 | 18.00 | 18.25 |
| 29 | 16.67 | ........ | 20.17 | 19.75 | 22.83 | 22.58 | 19.33 | 18.50 | 18.00 |
| 30 | 16.58 | ........ | 20.33 | 19.67 | 22.58 | 22.42 | 19.25 | 18.50 | 19.50 |
| 31 | 16.58 | ........ | 20.17 | ........ | 22.33 | ........ | 19.17 | ........ | ........ |

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for 1891–1912*—Continued.

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1901–02. | | | | | | | | | | | | |
| 1 | 20.25 | 17.75 | 17.80 | 17.80 | 17.67 | 18.25 | 18.75 | 20.17 | 23.67 | 25.25 | 19.50 | [illegible] |
| 2 | 19.92 | 17.75 | 17.80 | 17.42 | 17.80 | 18.75 | 18.58 | 20.08 | 23.92 | 25.33 | [illegible] | [illegible] |
| 3 | [illegible] | 17.75 | 17.80 | 17.33 | 17.50 | 19.08 | 18.50 | 20.00 | 24.00 | 25.42 | [illegible] | [illegible] |
| 4 | [illegible] | 17.75 | 17.42 | 17.33 | 18.00 | 18.75 | 18.75 | 20.50 | 24.33 | 25.25 | [illegible] | [illegible] |
| 5 | [illegible] | 17.67 | 17.42 | 17.25 | 17.83 | 18.67 | 18.80 | 20.92 | 24.50 | 25.17 | [illegible] | [illegible] |
| 6 | 18.30 | 17.67 | 17.33 | 17.25 | 18.00 | 18.67 | 18.50 | 21.00 | 24.67 | 25.00 | [illegible] | [illegible] |
| 7 | [illegible] | 17.67 | 17.33 | 17.00 | 18.17 | 19.00 | 18.42 | 21.08 | 24.67 | [illegible] | 19.67 | [illegible] |
| 8 | [illegible] | 17.67 | 17.42 | 16.83 | 18.25 | 20.00 | 18.42 | 21.67 | 24.50 | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | 17.50 | 17.42 | 16.75 | 18.83 | 19.50 | 18.42 | [illegible] | 24.33 | 24.25 | [illegible] | [illegible] |
| 10 | 18.50 | 17.50 | 17.33 | 16.83 | 19.00 | 19.67 | 18.58 | 22.17 | 24.08 | 24.08 | 19.17 | [illegible] |
| 11 | [illegible] | 17.42 | 17.33 | 16.83 | 18.75 | 19.33 | 19.83 | 21.83 | 23.92 | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | 17.33 | 16.67 | 18.83 | 19.33 | 19.83 | 21.67 | [illegible] | [illegible] | 19.67 | [illegible] |
| 13 | [illegible] | [illegible] | 17.30 | 16.42 | 18.67 | 19.75 | 19.58 | [illegible] | 24.42 | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | 17.25 | 17.30 | 16.33 | 18.58 | 19.50 | 19.50 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 17.67 | 17.25 | 17.58 | [illegible] | 18.33 | 19.33 | 19.50 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 18.00 | 17.25 | 17.67 | 17.42 | 18.33 | 19.33 | 19.75 | 21.42 | 24.42 | 22.67 | [illegible] | [illegible] |
| 17 | [illegible] | 17.25 | 17.58 | 17.30 | 19.17 | 19.33 | 19.50 | 21.50 | [illegible] | 22.67 | [illegible] | [illegible] |
| 18 | [illegible] | 17.25 | 17.58 | [illegible] | 19.17 | 19.33 | 19.50 | 21.50 | 24.67 | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | 17.67 | 17.25 | 19.00 | 19.25 | 19.92 | 21.67 | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | 17.25 | 17.67 | 17.25 | 18.75 | 19.25 | 20.42 | 21.83 | [illegible] | 21.75 | [illegible] | [illegible] |
| 21 | [illegible] | 17.25 | 17.30 | 17.25 | 18.67 | 19.33 | 20.58 | 22.17 | 24.42 | 21.58 | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | 18.58 | 19.50 | 20.58 | 22.17 | 24.25 | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | 18.50 | 19.50 | 20.83 | 22.25 | 24.08 | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | 17.42 | 18.50 | 19.42 | 21.00 | 22.42 | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | 17.33 | 18.42 | 19.25 | 20.92 | 22.42 | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | 18.42 | 19.25 | 20.75 | 22.42 | 23.83 | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | 18.42 | 19.17 | 20.50 | 22.58 | 24.08 | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19.08 | 20.42 | 22.67 | 24.33 | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | 18.33 | 19.00 | 20.42 | 23.00 | 24.67 | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | 18.92 | 20.33 | 23.17 | 25.00 | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | ...... | [illegible] | 17.67 | ...... | 18.75 | ...... | 22.42 | ...... | [illegible] | 18.08 | |
| 1902–03. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | 16.50 | [illegible] | [illegible] | [illegible] | 23.50 | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | 16.42 | [illegible] | [illegible] | 19.08 | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19.25 | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | ...... | [illegible] | [illegible] | ...... | [illegible] | ...... | [illegible] | ...... | [illegible] | [illegible] | ...... |

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for 1891-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1893-94.** | | | | | | | | | | | | |
| 1 | 17.00 | 16.42 | 16.58 | 17.00 | 16.58 | 16.42 | 18.33 | 19.42 | 22.83 | 20.25 | 19.42 | 19.00 |
| 2 | 16.83 | 16.42 | 16.67 | 16.83 | 16.67 | 16.75 | 18.25 | 19.58 | 22.75 | 20.33 | 19.42 | 19.08 |
| 3 | 16.75 | 16.58 | 16.75 | 16.67 | 16.67 | 16.92 | 18.00 | 19.67 | 22.83 | 20.25 | 19.42 | 19.16 |
| 4 | 16.67 | 16.50 | 16.67 | 16.50 | 16.58 | 17.00 | 17.92 | 20.75 | 22.83 | 20.25 | 19.33 | 19.42 |
| 5 | 16.42 | 16.50 | 16.67 | 16.42 | 16.58 | 17.00 | 17.92 | 20.92 | 23.00 | 20.08 | 19.33 | 19.42 |
| 6 | 19.83 | 16.50 | 16.58 | 16.42 | 16.58 | 17.08 | 17.92 | 21.00 | 23.00 | 20.00 | 19.25 | 19.25 |
| 7 | 18.75 | 16.50 | 16.50 | 16.42 | 16.83 | 17.08 | 18.00 | 21.00 | 23.08 | 19.83 | 19.25 | 18.92 |
| 8 | 18.00 | 16.50 | 16.58 | 16.58 | 17.08 | 17.16 | 18.00 | 20.92 | 23.16 | 19.83 | 19.33 | 18.67 |
| 9 | 17.83 | 16.50 | 16.33 | 16.92 | 17.00 | 17.25 | 18.08 | 20.67 | 23.16 | 19.67 | 19.25 | 18.67 |
| 10 | 17.42 | 16.58 | 16.25 | 17.00 | 17.00 | 17.08 | 18.08 | 20.50 | 23.25 | 19.67 | 19.33 | 18.67 |
| 11 | 17.08 | 16.75 | 16.33 | 17.08 | 17.08 | 16.92 | 18.16 | 20.33 | 23.25 | 19.67 | 19.33 | 18.50 |
| 12 | 17.00 | 16.83 | 16.33 | 16.83 | 16.92 | 17.00 | 18.33 | 20.50 | 23.33 | 19.67 | 19.33 | 18.67 |
| 13 | 16.92 | 16.75 | 16.42 | 16.92 | 16.92 | 16.92 | 18.50 | 20.83 | 23.58 | 19.83 | 19.25 | 18.08 |
| 14 | 16.92 | 16.67 | 16.58 | 16.83 | 16.83 | 16.92 | 18.42 | 21.50 | 23.67 | 20.25 | 19.33 | 18.67 |
| 15 | 16.83 | 16.83 | 16.67 | 16.58 | 16.83 | 16.92 | 18.33 | 21.08 | 23.67 | 20.16 | 19.25 | 18.58 |
| 16 | 16.67 | 16.75 | 16.83 | 16.42 | 16.75 | 16.92 | 18.00 | 22.42 | 23.33 | 19.83 | 19.42 | 18.67 |
| 17 | 16.58 | 16.67 | 16.92 | 16.25 | 16.92 | 17.00 | 18.00 | 22.50 | 23.00 | 19.67 | 19.16 | 18.50 |
| 18 | 16.58 | 16.67 | 17.00 | 16.16 | 16.83 | 16.92 | 18.00 | 22.58 | 22.67 | 19.75 | 19.25 | 18.42 |
| 19 | 16.42 | 16.83 | 17.17 | 16.00 | 16.83 | 17.25 | 18.00 | 22.75 | 22.25 | 19.75 | 19.25 | 18.67 |
| 20 | 16.33 | 16.75 | 17.17 | 15.92 | 16.75 | 17.42 | 18.33 | 23.08 | 22.16 | 19.50 | 19.16 | 18.67 |
| 21 | 16.25 | 16.92 | 16.75 | 15.83 | 16.83 | 17.33 | 18.25 | 23.25 | 21.83 | 19.42 | 19.00 | 18.50 |
| 22 | 16.33 | 17.00 | 16.75 | 15.83 | 16.83 | 17.25 | 18.16 | 23.42 | 21.67 | 19.33 | 19.00 | 18.50 |
| 23 | 16.42 | 16.92 | 16.83 | 15.83 | 16.83 | 17.25 | 18.16 | 23.33 | 21.50 | 19.33 | 18.83 | 18.67 |
| 24 | 16.42 | 17.00 | 16.83 | 15.83 | 16.75 | 17.25 | 18.50 | 23.16 | 21.16 | 19.50 | 18.83 | 18.58 |
| 25 | 16.50 | 16.92 | 16.92 | 15.92 | 16.67 | 17.58 | 18.83 | 23.00 | 21.00 | 19.67 | 18.75 | 18.58 |
| 26 | 16.42 | 16.83 | 17.00 | 16.00 | 16.58 | 18.42 | 19.08 | 23.08 | 20.75 | 19.67 | 18.75 | 18.50 |
| 27 | 16.50 | 16.83 | 17.17 | 16.25 | 16.58 | 18.33 | 19.50 | 23.16 | 20.58 | 19.50 | 18.75 | 18.42 |
| 28 | 16.42 | 16.75 | 17.17 | 16.33 | 16.50 | 18.16 | 19.33 | 23.33 | 20.50 | 19.58 | 18.92 | 18.42 |
| 29 | 16.42 | 16.75 | 17.17 | 16.42 | ...... | 18.08 | 19.42 | 23.42 | 20.25 | 19.67 | 19.00 | 18.42 |
| 30 | 16.50 | 16.67 | 17.17 | 16.58 | ...... | 18.16 | 19.33 | 23.16 | 20.16 | 19.50 | 19.16 | 18.33 |
| 31 | 16.50 | ...... | 17.17 | 16.58 | ...... | 18.33 | ...... | 23.08 | ...... | 19.42 | 19.25 | ...... |
| **1894-95.** | | | | | | | | | | | | |
| 1 | 18.42 | 18.75 | 18.50 | 18.83 | 18.08 | 17.17 | 18.58 | 21.92 | 22.67 | 21.00 | 19.92 | 18.75 |
| 2 | 18.42 | 18.75 | 18.50 | 18.92 | 17.83 | 17.75 | 18.92 | 22.00 | 22.58 | 21.00 | 20.00 | 18.50 |
| 3 | 18.33 | 18.75 | 18.58 | 19.00 | 17.75 | 17.67 | 19.58 | 22.33 | 22.33 | 21.00 | 20.00 | 18.75 |
| 4 | 18.33 | 18.33 | 18.58 | 19.17 | 17.67 | 17.67 | 19.50 | 22.42 | 22.33 | 20.83 | 19.83 | 18.83 |
| 5 | 18.25 | 18.83 | 18.58 | 19.17 | 17.42 | 17.83 | 19.83 | 22.67 | 22.50 | 20.83 | 19.75 | 18.50 |
| 6 | 18.33 | 19.16 | 18.67 | 19.33 | 17.25 | 19.50 | 19.83 | 22.83 | 22.50 | 21.00 | 19.67 | 18.42 |
| 7 | 18.33 | 19.16 | 18.67 | 19.50 | 17.17 | 19.42 | 19.75 | 23.00 | 22.17 | 21.67 | 19.50 | 18.42 |
| 8 | 18.33 | 19.08 | 18.67 | 19.42 | 17.08 | 19.17 | 19.50 | 22.75 | 22.00 | 21.58 | 19.58 | 18.42 |
| 9 | 18.33 | 19.08 | 18.67 | 19.25 | 17.00 | 19.00 | 19.33 | 22.50 | 21.83 | 21.50 | 19.75 | 18.42 |
| 10 | 18.50 | 19.00 | 18.67 | 19.17 | 16.83 | 19.08 | 19.17 | 22.17 | 21.83 | 21.50 | 19.83 | 18.25 |
| 11 | 18.50 | 18.83 | 18.67 | 19.00 | 16.83 | 19.00 | 19.17 | 21.83 | 21.83 | 21.17 | 19.83 | 18.25 |
| 12 | 18.42 | 18.83 | 18.67 | 19.00 | 16.75 | 19.08 | 19.17 | 21.75 | 21.83 | 20.92 | 19.83 | 18.25 |
| 13 | 18.50 | 18.75 | 18.67 | 18.92 | 16.75 | 19.00 | 19.17 | 21.50 | 21.75 | 20.92 | 19.67 | 18.25 |
| 14 | 18.67 | 18.58 | 18.83 | 18.92 | 16.75 | 18.75 | 19.33 | 21.33 | 22.00 | 20.83 | 19.58 | 18.33 |
| 15 | 18.67 | 18.58 | 18.83 | 18.92 | 16.83 | 18.75 | 19.83 | 21.33 | 22.33 | 20.67 | 19.50 | 18.33 |
| 16 | 18.58 | 18.58 | 18.83 | 18.92 | 16.83 | 18.67 | 19.83 | 21.83 | 22.33 | 20.58 | 19.42 | 18.33 |
| 17 | 18.58 | 18.58 | 18.92 | 19.00 | 17.00 | 18.75 | 19.25 | 22.50 | 22.42 | 20.33 | 19.25 | 18.33 |
| 18 | 18.58 | 18.50 | 18.83 | 22.00 | 17.50 | 18.83 | 19.33 | 23.00 | 22.50 | 20.25 | 19.25 | 18.33 |
| 19 | 18.58 | 18.50 | 18.92 | 24.75 | 17.58 | 18.75 | 20.33 | 23.25 | 22.67 | 20.33 | 19.33 | 18.25 |
| 20 | 18.50 | 18.58 | 18.83 | 25.33 | 17.75 | 18.67 | 20.50 | 23.42 | 22.83 | 20.83 | 19.17 | 18.25 |
| 21 | 18.67 | 18.58 | 18.75 | 26.33 | 17.67 | 18.67 | 20.67 | 23.58 | 22.83 | 20.75 | 19.17 | 18.00 |
| 22 | 18.67 | 18.58 | 18.67 | 23.58 | 17.67 | 18.67 | 21.00 | 23.67 | 22.75 | 20.58 | 19.33 | 17.83 |
| 23 | 18.67 | 18.50 | 18.67 | 23.00 | 17.50 | 18.50 | 20.92 | 23.75 | 22.83 | 20.50 | 19.33 | 17.83 |
| 24 | 18.58 | 18.58 | 18.75 | 21.17 | 17.50 | 18.33 | 21.00 | 23.67 | 22.83 | 20.58 | 19.17 | 17.75 |
| 25 | 18.67 | 18.67 | 18.75 | 20.92 | 17.83 | 18.25 | 21.25 | 23.42 | 22.67 | 20.33 | 19.25 | 17.75 |
| 26 | 18.67 | 18.58 | 18.67 | 20.00 | 17.25 | 18.33 | 22.00 | 23.42 | 22.33 | 20.17 | 19.17 | 17.75 |
| 27 | 18.75 | 18.58 | 19.08 | 19.67 | 17.25 | 18.33 | 22.17 | 23.33 | 22.00 | 20.00 | 19.17 | 17.75 |
| 28 | 18.75 | 18.50 | 19.00 | 19.42 | 17.25 | 18.50 | 22.25 | 23.33 | 21.75 | 19.92 | 19.25 | 17.75 |
| 29 | 18.75 | 18.50 | 18.92 | 19.17 | ...... | 18.50 | 22.25 | 23.17 | 21.50 | 19.92 | 19.00 | 17.67 |
| 30 | 18.75 | 18.50 | 18.80 | 18.75 | ...... | 18.50 | 22.00 | 23.00 | 21.17 | 19.83 | 18.75 | 17.58 |
| 31 | 18.75 | ...... | ...... | 18.42 | ...... | 18.50 | ...... | 22.83 | ...... | 19.75 | 18.83 | ...... |

[illegible] Colorado River at Yuma, Ariz., for 1891–1912—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19.42 | 20.00 | 21.83 | 21.25 | 19.83 | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20.00 | 22.00 | 21.17 | 19.42 | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.50 | 22.50 | 21.00 | 19.50 | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.17 | 23.25 | 20.83 | 19.60 | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.42 | 23.50 | 20.67 | 19.60 | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20.00 | 22.60 | 23.83 | 20.42 | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.33 | 23.92 | 20.42 | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.33 | 24.00 | 20.25 | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24.08 | 20.25 | 19.92 | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.00 | 24.00 | 20.25 | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.25 | 23.83 | 20.25 | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.33 | 23.75 | 20.00 | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.42 | 23.42 | 20.00 | 19.50 | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.50 | 23.17 | 20.00 | 19.33 | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.60 | 22.92 | 20.00 | 19.25 | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19.75 | 22.75 | 22.75 | 20.00 | 19.17 | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.75 | 22.75 | 20.00 | 19.00 | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.60 | [illegible] | 20.25 | 19.08 | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20.00 | 22.33 | 22.42 | 20.33 | 19.42 | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20.00 | 22.17 | 22.42 | 21.08 | 19.75 | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19.08 | [illegible] | 21.92 | 22.17 | 20.33 | 19.00 | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.92 | 20.08 | 19.00 | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.33 | 21.92 | 20.67 | 19.00 | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20.75 | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.67 | 20.67 | 18.75 | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19.92 | 20.67 | 21.60 | 20.50 | 18.75 | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20.00 | 20.50 | 21.50 | 20.60 | 19.00 | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19.25 | 20.00 | 20.50 | 21.50 | 20.50 | 19.00 | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | 18.92 | 19.33 | 20.00 | 20.75 | 21.33 | 20.50 | 18.75 | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | 19.00 | 20.67 | 21.25 | 20.83 | [illegible] | [illegible] |
| 31 | 18.25 | ...... | [illegible] | 18.42 | ...... | 19.50 | ...... | 21.08 | ...... | 20.75 | 18.42 | ...... |
| [illegible] | | | | | | | | | | | | |
| 1 | [illegible] | 19.42 | [illegible] | [illegible] | 18.33 | [illegible] | 19.42 | 22.42 | 25.17 | 21.50 | 19.25 | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.42 | 25.42 | 21.25 | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20.92 | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22.92 | 25.75 | 20.92 | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20.00 | 23.00 | [illegible] | 20.92 | 19.00 | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | 18.33 | [illegible] | [illegible] | 20.42 | 22.92 | [illegible] | 20.92 | 18.92 | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23.00 | 25.92 | 20.58 | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19.42 | [illegible] | [illegible] | 26.00 | 20.42 | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.00 | 23.75 | [illegible] | 20.42 | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19.50 | [illegible] | 24.00 | 26.00 | 20.25 | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | 18.00 | 20.33 | 21.42 | 24.33 | [illegible] | 20.33 | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24.58 | 25.33 | 20.50 | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24.83 | 24.75 | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.50 | 24.92 | 24.00 | 20.25 | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | 17.75 | [illegible] | [illegible] | 19.17 | 21.50 | 25.08 | [illegible] | 20.08 | 19.00 | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.42 | 25.25 | 23.33 | 20.25 | 18.92 | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.25 | 25.33 | 23.25 | 20.25 | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | 17.42 | [illegible] | [illegible] | [illegible] | 21.25 | 25.42 | 23.17 | 20.33 | 19.00 | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.42 | 25.50 | 23.08 | 20.33 | 19.08 | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21.42 | 25.50 | 23.25 | 20.25 | 19.17 | 20.25 |
| 21 | [illegible] | [illegible] | 18.00 | 19.42 | [illegible] | 19.00 | 21.42 | 25.42 | 23.25 | 20.00 | 19.08 | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | 19.75 | [illegible] | [illegible] | 21.92 | 25.25 | 23.42 | 19.75 | 19.08 | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | 19.42 | [illegible] | [illegible] | 22.42 | 25.08 | 23.25 | 19.50 | 18.92 | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | 19.00 | [illegible] | [illegible] | 22.75 | 25.00 | 22.75 | 19.50 | [illegible] | [illegible] |
| 25 | 19.67 | [illegible] | [illegible] | [illegible] | [illegible] | 18.75 | 23.00 | 25.00 | 22.33 | 19.42 | 18.75 | [illegible] |
| 26 | [illegible] | 19.42 | 18.33 | [illegible] | 18.42 | [illegible] | 23.17 | 25.17 | 22.17 | 19.42 | 19.25 | 19.25 |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23.00 | 25.25 | 21.75 | 19.42 | 18.75 | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25.42 | 21.67 | 19.33 | 18.67 | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | 22.50 | 25.42 | 21.67 | 19.33 | 18.75 | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | 22.42 | 25.33 | 21.67 | 19.33 | 18.75 | [illegible] |
| 31 | 19.33 | ...... | [illegible] | [illegible] | ...... | 19.33 | ...... | 25.25 | ...... | 19.25 | 18.75 | .... |

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for 1891–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1897–98.** | | | | | | | | | | | | |
| 1 | 18.92 | 18.75 | 18.42 | 17.92 | 18.00 | 18.92 | 18.67 | 21.50 | 21.58 | 23.42 | ....... | 19.75 |
| 2 | 18.92 | 18.83 | 18.42 | 17.83 | 18.00 | 19.00 | 18.67 | 21.42 | 21.50 | 23.42 | ....... | 19.75 |
| 3 | 18.92 | 19.17 | 18.75 | 17.75 | 18.25 | 19.00 | 18.58 | 21.42 | 21.58 | 23.17 | ....... | 19.83 |
| 4 | 18.83 | 19.17 | 18.58 | 17.75 | 18.25 | 19.00 | 18.58 | 21.75 | 21.75 | 22.83 | ....... | 19.83 |
| 5 | 19.17 | 18.92 | 18.42 | 17.58 | 17.92 | 18.92 | 18.83 | 22.00 | 22.25 | 22.58 | ....... | 19.75 |
| 6 | 19.17 | 18.75 | 18.58 | 17.58 | 18.00 | 18.83 | 18.67 | 22.00 | 22.58 | 22.25 | ....... | 19.83 |
| 7 | 18.92 | 18.75 | 18.58 | 17.58 | 17.83 | 18.75 | 18.50 | 22.00 | 22.75 | 22.00 | ....... | 19.67 |
| 8 | 18.75 | 18.75 | 18.42 | 17.50 | 17.75 | 18.67 | 18.50 | 22.00 | 22.83 | 21.83 | ....... | 19.42 |
| 9 | 18.42 | 18.67 | 18.42 | 17.50 | 18.00 | 18.67 | 18.67 | 21.75 | 22.92 | 21.67 | ....... | 19.17 |
| 10 | 18.50 | 18.67 | 18.33 | 17.83 | 18.08 | 18.75 | 19.00 | 21.58 | 23.17 | 21.50 | ....... | 19.00 |
| 11 | 18.83 | 18.67 | 18.25 | 17.75 | 18.33 | 19.00 | 19.08 | 21.33 | 23.17 | 21.33 | ....... | 19.08 |
| 12 | 19.25 | 18.58 | 18.25 | 17.75 | 18.17 | 19.08 | 18.92 | 21.25 | 23.00 | 21.25 | ....... | 19.00 |
| 13 | 21.00 | 18.58 | 18.08 | 17.92 | 18.17 | 19.25 | 18.67 | 21.17 | 22.92 | 21.50 | ....... | 18.92 |
| 14 | 20.75 | 18.50 | 18.08 | 18.08 | 18.17 | 19.08 | 18.50 | 21.17 | 22.67 | 21.50 | ....... | 18.83 |
| 15 | 21.50 | 18.58 | 18.08 | 18.42 | 18.25 | 18.92 | 18.75 | 21.17 | 22.58 | 21.42 | ....... | 18.83 |
| 16 | 21.42 | 18.58 | 18.00 | 18.58 | 18.42 | 18.75 | 18.92 | 21.00 | 22.50 | 21.33 | ....... | 18.75 |
| 17 | 20.92 | 18.58 | 18.00 | 18.75 | 18.50 | 18.75 | 18.83 | 20.83 | 22.42 | 21.50 | ....... | 18.67 |
| 18 | 20.17 | 18.58 | 18.00 | 18.75 | 18.58 | 18.92 | 18.92 | 20.83 | 22.33 | 21.33 | ....... | 18.58 |
| 19 | 19.92 | 18.58 | 18.00 | 18.75 | 18.58 | 18.92 | 19.00 | 20.92 | 22.42 | 21.25 | ....... | 18.75 |
| 20 | 19.67 | 18.50 | 18.00 | 18.83 | 18.50 | 18.83 | 20.08 | 21.17 | 22.33 | 21.08 | ....... | 18.75 |
| 21 | 19.58 | 18.42 | 17.92 | 18.83 | 18.58 | 18.92 | 20.17 | 21.50 | 22.33 | 21.08 | ....... | 18.58 |
| 22 | 19.42 | 18.42 | 18.00 | 18.75 | 18.67 | 19.17 | 20.25 | 21.67 | 22.50 | 21.50 | ....... | 18.42 |
| 23 | 19.92 | 18.42 | 18.17 | 18.50 | 18.92 | 19.08 | 21.17 | 21.75 | 22.75 | 22.00 | ....... | 18.42 |
| 24 | 19.50 | 18.33 | 18.25 | 18.42 | 18.92 | 19.08 | 21.08 | 21.75 | 23.08 | 21.92 | ....... | 18.42 |
| 25 | 19.33 | 18.33 | 18.08 | 18.25 | 18.92 | 18.83 | 21.67 | 21.67 | 23.25 | 21.50 | ....... | 18.42 |
| 26 | 19.25 | 18.42 | 18.08 | 18.42 | 18.92 | 18.75 | 21.75 | 21.83 | 23.50 | 21.17 | ....... | 18.42 |
| 27 | 19.00 | 18.50 | 18.08 | 18.50 | 18.92 | 18.67 | 21.58 | 21.75 | 23.50 | 21.00 | ....... | 18.33 |
| 28 | 19.00 | 18.50 | 18.08 | 18.33 | 18.92 | 18.67 | 21.50 | 21.50 | 23.50 | 20.50 | ....... | 18.25 |
| 29 | 19.00 | 18.50 | 18.08 | 18.17 | ....... | 18.67 | 21.50 | 21.50 | 23.50 | 20.33 | ....... | 18.17 |
| 30 | 18.83 | 18.42 | 18.08 | 18.17 | ....... | 18.75 | 21.50 | 21.50 | 23.42 | 20.17 | ....... | 18.00 |
| 31 | 18.75 | ....... | 18.00 | 18.08 | ....... | 18.67 | ....... | 21.42 | ....... | 20.17 | ....... | ...... |
| **1898–99.** | | | | | | | | | | | | |
| 1 | 18.00 | 18.17 | 18.58 | 17.75 | 18.58 | 19.00 | 19.00 | 20.50 | 23.42 | 25.67 | 20.83 | 18.83 |
| 2 | 18.00 | 18.25 | 18.50 | 17.92 | 18.50 | 19.08 | 18.83 | 20.67 | 23.33 | 25.58 | 20.83 | 18.75 |
| 3 | 18.08 | 18.33 | 18.42 | 18.00 | 18.58 | 19.25 | 19.00 | 21.25 | 23.67 | 25.58 | 20.75 | 18.75 |
| 4 | 18.00 | 18.33 | 18.33 | 17.92 | 18.58 | 19.50 | 19.00 | 21.50 | 23.67 | 25.50 | 20.67 | 18.67 |
| 5 | 18.00 | 18.50 | 18.33 | 17.83 | 18.58 | 19.75 | 19.00 | 21.75 | 23.67 | 25.33 | 20.92 | 18.58 |
| 6 | 18.00 | 18.58 | 18.33 | 17.75 | 18.67 | 19.75 | 19.00 | 22.00 | 23.83 | 25.00 | 21.17 | 18.50 |
| 7 | 18.00 | 18.58 | 18.42 | 17.75 | 18.67 | 19.75 | 19.00 | 22.08 | 23.83 | 24.75 | 21.33 | 18.42 |
| 8 | 18.00 | 18.50 | 18.42 | 17.92 | 18.67 | 19.67 | 19.00 | 22.17 | 24.00 | 24.67 | 21.50 | 18.42 |
| 9 | 18.00 | 18.58 | 18.58 | 18.08 | 18.67 | 19.58 | 19.83 | 21.83 | 24.33 | 24.50 | 21.17 | 18.42 |
| 10 | 18.00 | 18.50 | 18.58 | 18.08 | 18.75 | 19.58 | 20.17 | 21.42 | 24.17 | 24.33 | 21.50 | 18.42 |
| 11 | 18.00 | 18.50 | 18.58 | 18.00 | 18.75 | 19.42 | 19.83 | 21.17 | 24.00 | 24.33 | 21.67 | 18.42 |
| 12 | 18.00 | 18.50 | 18.50 | 17.83 | 18.75 | 19.08 | 19.75 | 21.00 | 23.67 | 24.08 | 21.75 | 18.42 |
| 13 | 17.92 | 18.50 | 18.50 | 17.75 | 18.75 | 19.00 | 19.58 | 20.75 | 23.67 | 24.00 | 21.67 | 18.25 |
| 14 | 17.92 | 18.50 | 18.50 | 17.67 | 18.83 | 19.00 | 19.50 | 20.50 | 23.83 | 23.83 | 21.83 | 18.33 |
| 15 | 17.92 | 18.50 | 18.50 | 17.75 | 18.83 | 19.00 | 19.50 | 20.50 | 24.00 | 23.75 | 20.83 | 18.33 |
| 16 | 17.92 | 18.58 | 18.58 | 18.00 | 18.92 | 19.00 | 19.50 | 20.67 | 24.08 | 23.33 | 20.33 | 18.33 |
| 17 | 17.83 | 18.67 | 18.75 | 18.42 | 18.92 | 19.17 | 19.58 | 21.00 | 24.33 | 23.17 | 20.00 | 18.33 |
| 18 | 17.83 | 18.75 | 18.92 | 18.58 | 18.75 | 19.17 | 19.50 | 21.50 | 24.33 | 23.00 | 19.92 | 18.17 |
| 19 | 17.83 | 18.83 | 19.00 | 18.67 | 18.67 | 19.25 | 19.50 | 22.33 | 24.33 | 22.83 | 19.67 | 18.17 |
| 20 | 17.83 | 18.83 | 18.83 | 18.67 | 18.58 | 19.17 | 19.50 | 23.42 | 24.58 | 22.58 | 19.50 | 18.08 |
| 21 | 17.83 | 18.92 | 18.67 | 18.67 | 18.67 | 19.08 | 19.42 | 23.83 | 24.83 | 22.42 | 19.42 | 18.00 |
| 22 | 17.83 | 18.92 | 18.42 | 18.67 | 18.75 | 19.17 | 19.42 | 24.00 | 25.00 | 22.17 | 19.33 | 17.92 |
| 23 | 17.83 | 18.92 | 18.17 | 18.75 | 18.83 | 19.17 | 19.50 | 24.17 | 25.00 | 22.00 | 19.33 | 17.83 |
| 24 | 17.83 | 18.75 | 18.00 | 18.67 | 18.75 | 19.17 | 19.58 | 24.33 | 25.17 | 22.00 | 19.42 | 17.83 |
| 25 | 17.83 | 18.75 | 17.92 | 18.67 | 18.83 | 19.25 | 19.67 | 24.50 | 25.25 | 21.67 | 19.50 | 17.67 |
| 26 | 18.00 | 18.75 | 17.75 | 18.67 | 18.75 | 19.33 | 20.33 | 24.50 | 25.33 | 21.83 | 19.00 | 17.50 |
| 27 | 18.00 | 18.75 | 17.67 | 18.67 | 18.92 | 19.25 | 20.92 | 24.50 | 25.33 | 21.75 | 19.00 | 18.67 |
| 28 | 18.08 | 18.75 | 17.67 | 18.58 | 18.92 | 19.17 | 20.92 | 24.17 | 25.50 | 21.50 | 19.08 | 18.17 |
| 29 | 18.17 | 18.67 | 17.58 | 18.42 | ....... | 19.08 | 20.83 | 23.83 | 25.75 | 21.33 | 19.00 | 18.08 |
| 30 | 18.17 | 18.67 | 17.50 | 18.50 | ....... | 19.00 | 20.58 | 23.50 | 25.67 | 21.17 | 18.92 | 18.00 |
| 31 | 18.17 | ....... | 17.58 | 18.50 | ....... | 19.00 | ....... | 23.33 | ....... | 21.00 | 18.83 | ...... |

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for 1891-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1899-1900.** | | | | | | | | | | | | |
| 1 | 18.00 | 18.25 | 18.58 | 17.8 | 18.3 | 17.7 | 19.4 | 19.7 | 24.6 | 23.0 | 17.6 | 16.9 |
| 2 | 17.92 | 18.25 | 18.58 | 17.8 | 18.3 | 17.8 | 19.3 | 19.7 | 24.8 | 22.8 | 18.0 | 16.8 |
| 3 | 17.83 | 18.25 | 18.67 | 17.7 | 18.3 | 17.8 | 19.3 | 20.5 | 25.0 | 22.7 | 17.4 | 16.7 |
| 4 | 17.75 | 18.25 | 18.58 | 17.5 | 18.2 | 17.8 | 19.3 | 20.5 | 25.2 | 22.3 | 17.3 | 16.6 |
| 5 | 17.75 | 18.33 | 18.50 | 17.4 | 18.1 | 17.7 | 19.3 | 20.5 | 25.3 | 22.0 | 17.3 | 16.5 |
| 6 | 17.75 | 18.33 | 18.58 | 17.3 | 18.0 | 17.7 | 19.4 | 20.1 | 25.5 | 21.7 | 17.2 | 16.6 |
| 7 | 17.75 | 18.25 | 18.58 | 17.2 | 18.1 | 17.6 | 19.5 | 20.3 | 25.7 | 21.6 | 17.1 | 16.5 |
| 8 | 17.67 | 18.33 | 18.58 | 17.2 | 18.0 | 17.7 | 19.4 | 20.3 | 25.8 | 21.3 | 17.2 | 16.5 |
| 9 | 17.50 | 18.33 | 18.67 | 17.2 | 18.0 | 17.8 | 19.3 | 20.3 | 26.0 | 21.2 | 17.2 | 16.5 |
| 10 | 17.50 | 18.33 | 18.58 | 17.2 | 17.9 | 17.8 | 19.3 | 20.5 | 26.0 | 20.7 | 17.2 | 16.4 |
| 11 | 17.50 | 18.25 | 18.33 | 17.3 | 17.9 | 17.7 | 19.4 | 20.7 | 26.0 | 20.5 | 17.2 | 16.4 |
| 12 | 17.50 | 18.25 | 18.33 | 17.3 | 17.8 | 17.7 | 19.4 | 21.0 | 25.9 | 20.3 | 17.3 | 16.6 |
| 13 | 17.33 | 18.25 | 18.25 | 17.4 | 17.7 | 17.7 | 19.3 | 21.3 | 25.7 | 20.2 | 17.2 | 17.3 |
| 14 | 17.25 | 18.17 | 18.17 | 17.4 | 17.8 | 17.8 | 19.2 | 21.4 | 25.5 | 19.8 | 16.9 | 18.0 |
| 15 | 17.17 | 18.17 | 18.17 | 17.4 | 17.8 | 17.8 | 19.2 | 21.6 | 25.4 | 19.7 | 16.8 | 17.7 |
| 16 | 17.00 | 18.17 | 18.25 | 17.7 | 17.7 | 18.0 | 19.2 | 21.7 | 25.3 | 19.6 | 16.9 | 17.5 |
| 17 | 17.00 | 18.17 | 18.25 | 17.8 | 17.8 | 18.0 | 19.5 | 22.3 | 25.2 | 19.5 | 16.7 | 17.7 |
| 18 | 17.00 | 18.17 | 18.08 | 18.1 | 17.8 | 18.1 | 19.5 | 22.9 | 24.8 | 19.2 | 16.7 | 17.4 |
| 19 | 17.08 | 18.17 | 18.00 | 18.2 | 17.8 | 18.2 | 19.4 | 23.4 | 24.7 | 19.0 | 16.7 | 17.7 |
| 20 | 17.08 | 18.25 | 17.83 | 18.3 | 17.8 | 18.3 | 19.5 | 23.7 | 24.5 | 18.9 | 16.8 | 18.1 |
| 21 | 17.08 | 18.50 | 17.75 | 18.3 | 17.8 | 18.3 | 19.8 | 23.8 | 24.2 | 18.8 | 16.8 | 17.8 |
| 22 | 17.17 | 18.50 | 17.67 | 18.3 | 17.7 | 18.5 | 20.3 | 24.0 | 24.2 | 18.8 | 16.8 | 17.7 |
| 23 | 18.67 | 18.42 | 17.67 | 18.3 | 17.7 | 18.5 | 20.2 | 24.0 | 24.0 | 18.5 | 16.8 | 17.4 |
| 24 | 19.17 | 18.42 | 17.67 | 18.2 | 17.7 | 18.5 | 20.3 | 24.2 | 23.9 | 18.4 | 16.8 | 17.3 |
| 25 | 18.92 | 18.42 | 17.58 | 18.2 | 17.7 | 18.6 | 19.9 | 24.4 | 23.8 | 18.3 | 16.9 | 17.2 |
| 26 | 18.67 | 18.50 | 17.67 | 18.2 | 17.7 | 18.6 | 19.8 | 24.7 | 23.7 | 18.3 | 16.9 | 17.2 |
| 27 | 18.50 | 18.50 | 17.58 | 18.2 | 17.8 | 18.7 | 19.7 | 24.7 | 23.4 | 18.2 | 16.8 | 17.0 |
| 28 | 18.25 | 18.50 | 17.50 | 18.2 | 17.8 | 19.2 | 19.7 | 24.5 | 23.3 | 18.0 | 16.9 | 17.0 |
| 29 | 18.17 | 18.50 | 17.50 | 18.3 | ...... | 19.8 | 19.7 | 24.2 | 23.1 | 17.9 | 16.7 | 17.0 |
| 30 | 18.17 | 18.58 | 17.33 | 18.3 | ...... | 19.7 | 19.7 | 24.2 | 23.1 | 17.8 | 16.7 | 17.0 |
| 31 | 18.25 | ...... | 17.42 | 18.3 | ...... | 19.6 | ...... | 24.4 | ...... | 17.7 | 16.7 | ...... |
| **1900-1901.** | | | | | | | | | | | | |
| 1 | 17.0 | 17.6 | 17.8 | 17.1 | 17.2 | 19.8 | 18.5 | 20.5 | 27.0 | 23.9 | 19.6 | 19.2 |
| 2 | 16.9 | 17.6 | 17.7 | 17.0 | 17.2 | 20.2 | 18.4 | 21.0 | 27.0 | 24.1 | 19.8 | 19.1 |
| 3 | 16.8 | 17.5 | 17.4 | 16.9 | 17.2 | 20.0 | 18.3 | 21.2 | 26.7 | 23.9 | 19.8 | 19.2 |
| 4 | 16.7 | 17.4 | 17.7 | 16.9 | 17.3 | 20.0 | 18.4 | 21.8 | 26.4 | 23.8 | 19.8 | 19.1 |
| 5 | 16.8 | 17.5 | 17.7 | 17.0 | 17.4 | 19.7 | 18.3 | 22.3 | 26.2 | 23.6 | 19.9 | 19.0 |
| 6 | 16.8 | 17.4 | 17.7 | 17.0 | 17.7 | 19.6 | 18.3 | 22.6 | 26.2 | 23.2 | 20.0 | 19.1 |
| 7 | 16.8 | 17.4 | 17.7 | 17.0 | 18.0 | 19.5 | 18.3 | 22.7 | 25.9 | 23.0 | 20.4 | 19.3 |
| 8 | 16.9 | 17.4 | 17.7 | 17.0 | 18.3 | 19.3 | 18.3 | 23.2 | 25.6 | 23.1 | 20.1 | 19.3 |
| 9 | 17.3 | 17.4 | 17.7 | 16.9 | 18.5 | 19.2 | 18.3 | 23.7 | 25.3 | 23.0 | 20.0 | 19.0 |
| 10 | 17.3 | 17.5 | 17.7 | 16.8 | 20.7 | 19.0 | 18.2 | 24.1 | 24.9 | 22.7 | 20.2 | 19.3 |
| 11 | 17.2 | 17.5 | 17.7 | 16.6 | 19.2 | 19.0 | 18.2 | 23.9 | 24.7 | 22.7 | 19.7 | 19.1 |
| 12 | 17.2 | 17.5 | 17.7 | 16.4 | 18.7 | 19.2 | 18.2 | 23.6 | 24.5 | 22.6 | 19.4 | 18.7 |
| 13 | 17.2 | 17.5 | 17.7 | 16.3 | 18.7 | 19.2 | 18.2 | 23.7 | 24.2 | 22.4 | 19.3 | 18.7 |
| 14 | 17.3 | 17.5 | 17.7 | 16.2 | 18.7 | 19.3 | 18.0 | 23.7 | 24.2 | 22.1 | 20.0 | 18.7 |
| 15 | 17.3 | 17.5 | 17.7 | 16.2 | 18.6 | 19.3 | 17.9 | 23.5 | 24.0 | 21.9 | 19.5 | 19.0 |
| 16 | 17.3 | 17.5 | 17.7 | 16.4 | 18.5 | 19.3 | 17.9 | 23.4 | 24.2 | 21.7 | 19.3 | 18.8 |
| 17 | 17.3 | 17.5 | 17.6 | 16.5 | 18.7 | 19.5 | 17.9 | 23.4 | 24.3 | 21.4 | 19.3 | 18.7 |
| 18 | 17.3 | 17.6 | 17.4 | 16.5 | 18.7 | 19.6 | 17.9 | 23.7 | 24.4 | 21.2 | 20.7 | 18.5 |
| 19 | 17.4 | 17.5 | 17.4 | 16.7 | 18.6 | 20.0 | 18.0 | 24.0 | 24.5 | 21.1 | 20.0 | 18.3 |
| 20 | 17.3 | 17.6 | 17.4 | 17.0 | 18.3 | 19.7 | 18.1 | 24.2 | 24.2 | 21.0 | 19.6 | 18.2 |
| 21 | 17.3 | 17.7 | 17.4 | 17.0 | 18.2 | 19.6 | 18.1 | 24.5 | 24.0 | 20.9 | 19.6 | 17.9 |
| 22 | 17.3 | 17.7 | 17.4 | 16.8 | 18.1 | 19.3 | 18.2 | 24.8 | 23.8 | 20.9 | 19.3 | 17.8 |
| 23 | 17.6 | 17.7 | 17.5 | 16.8 | 18.0 | 19.2 | 18.2 | 25.2 | 23.7 | 20.7 | 19.2 | 17.7 |
| 24 | 17.6 | 18.1 | 17.5 | 16.8 | 18.0 | 19.1 | 18.3 | 25.5 | 23.5 | 20.6 | 19.0 | 17.6 |
| 25 | 17.7 | 18.3 | 17.5 | 17.0 | 18.2 | 19.0 | 18.6 | 25.6 | 23.3 | 20.4 | 19.1 | 17.6 |
| 26 | 17.8 | 18.6 | 17.5 | 17.1 | 18.4 | 18.8 | 18.7 | 25.9 | 23.2 | 20.2 | 19.1 | 17.6 |
| 27 | 17.8 | 18.7 | 17.5 | 17.1 | 18.7 | 18.7 | 18.8 | 26.3 | 23.3 | 20.1 | 18.7 | 17.5 |
| 28 | 17.7 | 17.9 | 17.4 | 17.1 | 18.8 | 18.7 | 19.2 | 26.7 | 23.7 | 19.9 | 19.2 | 17.5 |
| 29 | 17.6 | 17.6 | 17.3 | 17.0 | ...... | 18.5 | 19.7 | 20.8 | 23.7 | 19.7 | 20.4 | 17.4 |
| 30 | 17.6 | 17.7 | 17.2 | 17.0 | ...... | 18.5 | 19.4 | 26.9 | 23.7 | 19.5 | 20.1 | 17.3 |
| 31 | 17.6 | ...... | 17.1 | 17.0 | ...... | 18.6 | ...... | 27.0 | ...... | 19.3 | 19.7 | ...... |

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for 1891-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1901-2.** | | | | | | | | | | | | |
| 1 | 17.2 | 17.2 | 17.7 | 17.1 | 18.0 | 17.9 | 18.2 | 20.0 | 22.3 | 22.0 | 18.4 | 17.5 |
| 2 | 17.1 | 17.3 | 17.7 | 17.0 | 18.0 | 17.9 | 18.0 | 20.7 | 22.2 | 21.7 | 18.3 | 17.3 |
| 3 | 17.0 | 17.3 | 17.5 | 17.0 | 18.0 | 18.0 | 17.9 | 20.8 | 22.2 | 21.5 | 18.3 | 17.0 |
| 4 | 16.9 | 17.3 | 17.5 | 17.0 | 17.9 | 17.9 | 17.9 | 20.5 | 22.7 | 21.3 | 18.3 | 18.0 |
| 5 | 16.8 | 17.4 | 17.5 | 17.0 | 17.9 | 17.9 | 17.9 | 20.3 | 23.1 | 21.1 | 18.1 | 18.8 |
| 6 | 16.8 | 17.5 | 17.6 | 17.0 | 17.8 | 17.9 | 18.0 | 20.3 | 23.1 | 20.8 | 18.0 | 18.3 |
| 7 | 16.8 | 17.5 | 17.6 | 17.0 | 17.7 | 18.1 | 18.0 | 20.4 | 23.5 | 20.7 | 17.9 | 18.0 |
| 8 | 16.7 | 17.5 | 17.5 | 17.2 | 17.7 | 18.2 | 18.2 | 20.5 | 23.7 | 20.6 | 17.8 | 17.6 |
| 9 | 16.8 | 17.5 | 17.5 | 17.2 | 17.6 | 18.1 | 18.2 | 20.3 | 24.0 | 20.4 | 17.8 | 17.5 |
| 10 | 16.8 | 17.5 | 17.5 | 17.3 | 17.5 | 18.1 | 18.2 | 20.5 | 24.2 | 20.3 | 17.8 | 17.3 |
| 11 | 16.8 | 17.5 | 17.5 | 17.3 | 17.5 | 18.1 | 18.2 | 22.0 | 24.3 | 20.3 | 17.7 | 17.3 |
| 12 | 16.8 | 17.5 | 17.5 | 17.3 | 17.6 | 18.1 | 18.2 | 22.3 | 24.2 | 20.6 | 17.7 | 17.3 |
| 13 | 16.8 | 17.5 | 17.6 | 17.3 | 17.1 | 18.2 | 18.2 | 22.3 | 24.3 | 20.5 | 17.6 | 17.3 |
| 14 | 16.8 | 17.7 | 17.5 | 17.3 | 17.1 | 18.2 | 18.2 | 22.8 | 24.0 | 20.2 | 17.6 | 17.3 |
| 15 | 16.8 | 17.6 | 17.5 | 17.3 | 17.2 | 18.3 | 18.2 | 22.9 | 23.8 | 20.1 | 17.5 | 17.3 |
| 16 | 16.8 | 17.7 | 17.5 | 17.3 | 17.3 | 18.4 | 18.2 | 23.2 | 23.9 | 20.0 | 17.4 | 17.2 |
| 17 | 16.8 | 17.7 | 17.5 | 17.4 | 17.3 | 18.4 | 18.1 | 23.5 | 23.7 | 20.3 | 17.3 | 17.7 |
| 18 | 16.9 | 17.7 | 17.7 | 17.6 | 17.3 | 18.3 | 18.0 | 23.7 | 23.8 | 19.8 | 17.3 | 17.5 |
| 19 | 16.9 | 17.7 | 17.7 | 17.7 | 17.3 | 18.3 | 18.0 | 21.1 | 23.7 | 19.8 | 17.1 | 17.3 |
| 20 | 16.9 | 17.6 | 17.7 | 17.7 | 17.2 | 18.3 | 18.0 | 24.3 | 23.6 | 19.7 | 17.0 | 17.3 |
| 21 | 16.9 | 17.5 | 17.7 | 17.7 | 17.1 | 18.3 | 18.0 | 24.3 | 23.5 | 19.5 | 17.8 | 17.0 |
| 22 | 17.0 | 17.5 | 17.8 | 17.7 | 17.3 | 18.3 | 18.3 | 24.4 | 23.5 | 19.4 | 18.5 | 16.8 |
| 23 | 17.1 | 17.5 | 17.8 | 17.7 | 17.7 | 18.3 | 19.3 | 24.4 | 23.2 | 19.3 | 18.3 | 16.8 |
| 24 | 17.2 | 17.5 | 17.8 | 17.7 | 18.0 | 18.3 | 19.8 | 24.4 | 23.1 | 19.4 | 17.9 | 16.9 |
| 25 | 17.2 | 17.5 | 17.8 | 17.8 | 18.1 | 18.3 | 19.8 | 24.4 | 23.0 | 19.1 | 17.8 | 17.1 |
| 26 | 17.2 | 17.5 | 17.7 | 17.9 | 18.1 | 18.2 | 19.8 | 24.5 | 22.7 | 19.3 | 18.0 | 16.8 |
| 27 | 17.2 | 17.5 | 17.6 | 17.9 | 18.1 | 18.3 | 19.9 | 24.3 | 22.6 | 19.0 | 17.9 | 16.7 |
| 28 | 17.2 | 17.5 | 17.5 | 17.9 | 18.0 | 18.3 | 20.0 | 24.0 | 22.5 | 18.5 | 17.7 | 16.6 |
| 29 | 17.2 | 17.6 | 17.2 | 17.8 | ....... | 18.3 | 19.8 | 23.5 | 22.3 | 18.5 | 17.3 | 17.5 |
| 30 | 17.2 | 17.7 | 17.0 | 18.0 | ....... | 18.3 | 19.8 | 23.0 | 22.2 | 18.4 | 17.2 | 19.4 |
| 31 | 17.2 | ....... | 17.0 | 18.0 | ....... | 18.3 | ....... | 22.7 | ....... | 18.3 | 17.2 | ...... |
| **1902-3.** | | | | | | | | | | | | |
| 1 | 18.9 | 17.4 | 20.0 | 17.6 | 17.3 | 17.37 | 20.48 | 20.88 | 23.5 | 27.45 | 21.55 | 19.35 |
| 2 | 18.5 | 17.3 | 19.5 | 17.4 | 17.25 | 17.53 | 20.3 | 21.55 | 23.4 | 27.25 | 21.5 | 19.25 |
| 3 | 18.4 | 17.3 | 19.3 | 17.3 | 17.15 | 17.64 | 20.4 | 21.72 | 23.4 | 27.1 | 21.6 | 19.2 |
| 4 | 18.6 | 17.3 | 19.0 | 17.2 | 17.1 | 17.7 | 21.05 | 21.75 | 23.4 | 26.9 | 21.45 | 19.05 |
| 5 | 18.3 | 17.3 | 18.9 | 17.0 | 17.2 | 17.72 | 20.8 | 21.8 | 23.25 | 26.65 | 21.3 | 19.15 |
| 6 | 18.1 | 17.3 | 18.6 | 16.9 | 17.2 | 18.02 | 20.98 | 21.9 | 23.4 | 26.35 | 21.1 | 19.5 |
| 7 | 18.0 | 17.2 | 18.4 | 16.9 | 17.2 | 18.96 | 21.28 | 21.98 | 23.75 | 26.05 | 20.95 | 19.35 |
| 8 | 18.1 | 17.2 | 18.3 | 16.9 | 17.28 | 18.92 | 21.5 | 21.95 | 24.25 | 25.75 | 20.85 | 19.3 |
| 9 | 18.1 | 17.2 | 18.3 | 16.9 | 17.38 | 18.66 | 22.75 | 22.0 | 24.5 | 25.2 | 20.8 | 19.4 |
| 10 | 18.1 | 17.3 | 18.2 | 16.9 | 17.52 | 18.48 | 22.65 | 22.15 | 24.8 | 24.75 | 20.65 | 19.4 |
| 11 | 18.5 | 17.3 | 18.1 | 16.85 | 17.71 | 18.37 | 22.2 | 22.2 | 25.0 | 24.35 | 20.5 | 19.55 |
| 12 | 18.3 | 17.4 | 18.0 | 16.8 | 17.82 | 18.22 | 21.92 | 22.5 | 25.25 | 23.65 | 20.45 | 19.4 |
| 13 | 18.0 | 17.5 | 18.1 | 16.8 | 17.9 | 18.22 | 21.42 | 22.75 | 25.55 | 23.25 | 20.15 | 19.15 |
| 14 | 17.8 | 18.0 | 17.7 | 16.95 | 17.95 | 18.32 | 21.05 | 23.05 | 25.65 | 22.9 | 20.1 | 19.05 |
| 15 | 17.8 | 18.5 | 17.6 | 17.0 | 18.04 | 19.85 | 20.78 | 23.3 | 25.75 | 22.7 | 20.1 | 19.05 |
| 16 | 17.6 | 18.0 | 17.5 | 17.1 | 18.0 | 19.8 | 20.45 | 23.4 | 26.2 | 22.75 | 20.05 | 19.05 |
| 17 | 17.6 | 17.8 | 17.7 | 17.1 | 17.76 | 19.52 | 20.5 | 23.5 | 26.35 | 22.8 | 19.8 | 19.4 |
| 18 | 17.4 | 18.1 | 18.3 | 17.05 | 17.54 | 19.75 | 20.4 | 23.8 | 26.5 | 22.6 | 19.8 | 19.95 |
| 19 | 17.6 | 18.1 | 18.1 | 17.0 | 17.36 | 19.88 | 20.55 | 23.98 | 26.65 | 22.4 | 19.8 | 19.5 |
| 20 | 17.6 | 18.1 | 18.0 | 17.0 | 17.25 | 19.65 | 20.65 | 24.2 | 26.8 | 22.4 | 19.85 | 19.3 |
| 21 | 17.4 | 18.0 | 17.8 | 17.0 | 17.21 | 19.62 | 20.6 | 24.45 | 26.95 | 22.3 | 19.8 | 19.3 |
| 22 | 17.4 | 18.1 | 17.8 | 17.0 | 17.22 | 20.58 | 20.6 | 24.9 | 27.15 | 22.15 | 19.7 | 19.55 |
| 23 | 17.3 | 18.1 | 17.8 | 17.1 | 17.24 | 20.52 | 20.55 | 25.2 | 27.25 | 22.15 | 19.65 | 19.6 |
| 24 | 17.3 | 18.4 | 18.0 | 17.2 | 17.27 | 20.3 | 20.5 | 25.45 | 27.5 | 22.9 | 19.45 | 19.6 |
| 25 | 17.3 | 18.5 | 18.2 | 17.35 | 17.3 | 20.1 | 20.68 | 25.6 | 27.65 | 23.0 | 19.25 | 19.6 |
| 26 | 17.3 | 18.4 | 18.1 | 17.4 | 17.27 | 20.02 | 20.88 | 25.45 | 27.65 | 22.9 | 19.2 | 19.7 |
| 27 | 17.3 | 18.5 | 18.3 | 17.4 | 17.24 | 20.02 | 20.9 | 25.1 | 27.7 | 22.6 | 19.2 | 19.75 |
| 28 | 17.3 | 18.5 | 18.2 | 17.45 | 17.26 | 19.88 | 20.8 | 24.85 | 27.6 | 22.3 | 19.2 | 19.7 |
| 29 | 17.2 | 18.5 | 18.0 | 17.5 | ....... | 19.65 | 20.7 | 24.25 | 27.6 | 21.85 | 19.2 | 19.7 |
| 30 | 17.2 | 18.3 | 17.8 | 17.5 | ....... | 19.6 | 20.72 | 23.85 | 27.5 | 21.75 | 19.25 | 20.1 |
| 31 | 17.3 | ....... | 17.7 | 17.4 | ....... | 20.15 | ....... | 23.6 | ....... | 21.6 | 19.4 | ...... |

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for [illegible]—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1903–4.** | | | | | | | | | | | | |
| 1 | 20.4 | 19.7 | 19.6 | 18.92 | 18.85 | 19.45 | 20.05 | 22.0 | 25.7 | 25.3 | 22.25 | 22.1 |
| 2 | 20.35 | 19.7 | 19.7 | 18.92 | 18.85 | 19.5 | 20.0 | 21.75 | 25.9 | 25.15 | 22.2 | [illegible] |
| 3 | 20.6 | 19.7 | 19.65 | 18.88 | 18.9 | 19.5 | 20.0 | 21.8 | 26.1 | 24.9 | 22.2 | 22.1 |
| 4 | 20.7 | 19.7 | 19.45 | 18.84 | 18.9 | 19.55 | 20.0 | 21.7 | 26.25 | 24.45 | 22.15 | 22.4 |
| 5 | 20.7 | 19.7 | 19.2 | 18.84 | 18.9 | 19.55 | 20.15 | 21.5 | 26.25 | 24.25 | 21.95 | [illegible] |
| 6 | 21.0 | 19.7 | 19.25 | 18.84 | 18.9 | 19.55 | 20.2 | 21.5 | 26.2 | 24.75 | 21.95 | 22.25 |
| 7 | 20.95 | 19.7 | 19.4 | 18.79 | 18.85 | 19.6 | 20.5 | 21.85 | 26.0 | [illegible] | 22.1 | [illegible] |
| 8 | 20.4 | 19.7 | 19.4 | 18.75 | 18.8 | 19.7 | 20.6 | 22.1 | 25.9 | [illegible] | 22.1 | [illegible] |
| 9 | 20.15 | 19.7 | 19.5 | 18.74 | 18.75 | 19.8 | 20.4 | 22.3 | 25.9 | [illegible] | 22.25 | [illegible] |
| 10 | 19.95 | 19.7 | 19.6 | 18.65 | 18.75 | 19.9 | 20.2 | 22.8 | 25.7 | 23.5 | 22.2 | [illegible] |
| 11 | 19.95 | 19.7 | 19.65 | 18.6 | 18.7 | 20.0 | 20.05 | 22.9 | 25.5 | 23.4 | [illegible] | 21.1 |
| 12 | 20.2 | 19.7 | 19.65 | 18.51 | 18.7 | 20.0 | 20.0 | 22.65 | 25.3 | 23.15 | 21.95 | [illegible] |
| 13 | 20.4 | 19.7 | 19.6 | 18.47 | 18.75 | 20.4 | 20.0 | 22.66 | 24.9 | 23.0 | 22.1 | 20.95 |
| 14 | 20.35 | 19.7 | 19.55 | 18.55 | 18.75 | 20.55 | 19.95 | 22.5 | 24.7 | 23.0 | 21.95 | 20.9 |
| 15 | 20.1 | 19.7 | 19.5 | 18.64 | 18.75 | 20.25 | 19.9 | 22.4 | 24.7 | 23.05 | 21.95 | 20.9 |
| 16 | 19.95 | 19.7 | 19.4 | 18.7 | 18.75 | 19.95 | 19.95 | 22.6 | 24.7 | 22.9 | 21.95 | 20.6 |
| 17 | 19.95 | 19.7 | 19.3 | 18.7 | 18.85 | 19.9 | 19.9 | 22.7 | 24.8 | 22.95 | 22.0 | 20.5 |
| 18 | 19.85 | 19.7 | 19.2 | 18.7 | 18.95 | 19.85 | 19.95 | 22.7 | 24.55 | 22.85 | 21.75 | 20.5 |
| 19 | 19.8 | 19.65 | 19.05 | 18.6 | 19.0 | 19.85 | 20.15 | 22.9 | 24.8 | 22.75 | 21.4 | 20.3 |
| 20 | 19.8 | 19.65 | 18.85 | 18.7 | 19.05 | 19.85 | 20.3 | 23.25 | 25.1 | 22.55 | 21.5 | 20.25 |
| 21 | 19.8 | 19.65 | 18.65 | 18.75 | 19.1 | 19.85 | 20.25 | 23.6 | 25.3 | 22.5 | 21.3 | 20.1 |
| 22 | 19.7 | 19.65 | 18.55 | 18.75 | 19.2 | 19.8 | 20.3 | 23.9 | 25.4 | 22.4 | 21.3 | 20.1 |
| 23 | 19.7 | 19.6 | 18.5 | 18.75 | 19.15 | 19.8 | 20.3 | 23.95 | 25.5 | 22.3 | 21.3 | 19.95 |
| 24 | 19.7 | 19.6 | 18.4 | 18.75 | 19.2 | 19.9 | 20.3 | 24.05 | 25.7 | 22.25 | 23.0 | 19.85 |
| 25 | 19.7 | 19.6 | 18.35 | 18.75 | 19.3 | 19.95 | 20.5 | 24.1 | 25.7 | 22.1 | 23.0 | 19.7 |
| 26 | 19.7 | 19.6 | 18.3 | 18.7 | 19.35 | 19.95 | 21.3 | 24.4 | 25.6 | 22.1 | 22.25 | 19.6 |
| 27 | 19.7 | 19.45 | 18.35 | 18.7 | 19.25 | 19.95 | 21.6 | 24.7 | 25.65 | 22.05 | 22.1 | 19.55 |
| 28 | 19.75 | 19.4 | 18.45 | 18.75 | 19.25 | 20.1 | 21.8 | 24.95 | 25.55 | 22.25 | 22.1 | 19.45 |
| 29 | 19.8 | 19.35 | 18.75 | 18.75 | 19.3 | 20.15 | 22.0 | 25.0 | 25.55 | 22.0 | 22.4 | [illegible] |
| 30 | 19.8 | 19.5 | 18.9 | 18.8 | ....... | 20.15 | 22.0 | 25.05 | 25.5 | 22.0 | 22.9 | 19.3 |
| 31 | 19.7 | ....... | 18.9 | 18.8 | ....... | 20.05 | ....... | 25.3 | ....... | 22.3 | 22.25 | ..... |
| **1904–5.** | | | | | | | | | | | | |
| 1 | 19.3 | 20.0 | 19.1 | 18.5 | 19.45 | 23.9 | 21.5 | 25.0 | 27.55 | 26.8 | 19.95 | 18.5 |
| 2 | 19.3 | 20.0 | 19.1 | 18.5 | 19.6 | 25.05 | 21.4 | 24.7 | 27.8 | 26.5 | 19.9 | 18.4 |
| 3 | 19.3 | 20.0 | 19.1 | 18.5 | 19.7 | 26.7 | 21.3 | 24.7 | 28.0 | 25.9 | 19.95 | 18.4 |
| 4 | 19.3 | 19.9 | 19.05 | 18.6 | 19.7 | 26.7 | 21.3 | 24.25 | 28.2 | 25.45 | 19.8 | 18.45 |
| 5 | 19.55 | 19.85 | 19.0 | 18.75 | 20.3 | 25.3 | 21.66 | 24.25 | 28.35 | 26.45 | 19.8 | 18.4 |
| 6 | 20.95 | 19.8 | 19.0 | 18.95 | 21.2 | 24.8 | 22.6 | 24.55 | 28.45 | 25.0 | 19.9 | 18.3 |
| 7 | 20.3 | 19.7 | 19.05 | 19.0 | 21.06 | 24.8 | 22.5 | 24.7 | 28.55 | 24.6 | 20.3 | 18.2 |
| 8 | 20.2 | 19.65 | 19.05 | 18.9 | 27.2 | 24.7 | 22.1 | 25.1 | 28.3 | 24.1 | 20.5 | 18.3 |
| 9 | 20.3 | 19.6 | 19.0 | 18.65 | 28.75 | 24.1 | 22.0 | 25.75 | 28.2 | 23.8 | 20.3 | 18.45 |
| 10 | 20.9 | 19.6 | 19.0 | 21.0 | 26.6 | 23.9 | 22.0 | 26.1 | 28.15 | 23.35 | 20.2 | 18.95 |
| 11 | 20.6 | 19.6 | 18.9 | 19.25 | 24.1 | 24.1 | 21.85 | 26.3 | 28.2 | 22.8 | 20.45 | 18.7 |
| 12 | 20.7 | 19.65 | 18.9 | 19.2 | 22.95 | 24.75 | 22.1 | 26.1 | 28.25 | 22.6 | 20.4 | 18.6 |
| 13 | 21.4 | 19.65 | 18.85 | 19.25 | 22.4 | 24.35 | 25.45 | 25.5 | 28.4 | 22.1 | 20.15 | 18.85 |
| 14 | 21.85 | 19.65 | 18.85 | 19.45 | 22.2 | 23.7 | 29.25 | 25.1 | 28.7 | 22.0 | 20.1 | 19.45 |
| 15 | 22.3 | 19.65 | 18.8 | 19.65 | 22.25 | 24.35 | 29.65 | 25.0 | 28.7 | 21.9 | 19.75 | 19.2 |
| 16 | 22.8 | 19.6 | 18.8 | 19.75 | 21.6 | 26.35 | 27.2 | 25.05 | 28.75 | 21.95 | 19.6 | 18.8 |
| 17 | 22.35 | 19.5 | 18.85 | 22.2 | 21.1 | 27.35 | 24.9 | 24.95 | 28.85 | 22.25 | 19.35 | 18.65 |
| 18 | 22.0 | 19.5 | 19.05 | 23.8 | 21.4 | 26.55 | 24.55 | 24.7 | 28.95 | 21.7 | 19.15 | 18.6 |
| 19 | 21.15 | 19.5 | 19.1 | 22.2 | 22.65 | 28.1 | 24.9 | 24.5 | 29.15 | 21.3 | 19.05 | 18.6 |
| 20 | 21.0 | 19.5 | 19.0 | 21.0 | 24.9 | 30.3 | 24.4 | 24.3 | 29.05 | 21.25 | 19.0 | 18.7 |
| 21 | 20.75 | 19.4 | 18.85 | 20.45 | 25.75 | 29.75 | 23.3 | 24.45 | 29.1 | 20.95 | 18.85 | 18.6 |
| 22 | 20.6 | 19.3 | 18.7 | 20.55 | 25.85 | 28.9 | 22.8 | 24.65 | 29.1 | 20.7 | 18.8 | 18.45 |
| 23 | 20.4 | 19.3 | 18.5 | 20.3 | 23.55 | 27.75 | 22.6 | 24.85 | 29.0 | 20.5 | 18.75 | 18.45 |
| 24 | 20.3 | 19.3 | 18.4 | 20.0 | 22.0 | 25.6 | 22.35 | 25.25 | 28.85 | 20.5 | 18.7 | 18.4 |
| 25 | 20.2 | 19.2 | 18.35 | 19.8 | 21.45 | 24.1 | 22.6 | 25.55 | 28.75 | 20.45 | 18.65 | 18.35 |
| 26 | 20.1 | 19.1 | 18.3 | 19.75 | 23.65 | 23.4 | 23.45 | 25.75 | 28.56 | 20.35 | 18.65 | 18.2 |
| 27 | 20.1 | 19.1 | 18.3 | 19.65 | 23.5 | 23.1 | 23.95 | 26.0 | 28.25 | 20.2 | 18.7 | 18.0 |
| 28 | 20.1 | 19.05 | 18.3 | 18.55 | 23.5 | 22.85 | 24.15 | 26.4 | 27.9 | 20.05 | 18.7 | 18.0 |
| 29 | 19.95 | 19.05 | 18.4 | 19.4 | ....... | 22.4 | 23.95 | 26.8 | 27.6 | 19.95 | 18.65 | 18.0 |
| 30 | 19.95 | 19.05 | 18.6 | 19.35 | ....... | 22.0 | 24.55 | 27.0 | 27.25 | 20.0 | 19.5 | 18.0 |
| 31 | 19.95 | ....... | 18.5 | 19.3 | ....... | 21.9 | ....... | 27.4 | ....... | 19.95 | 18.8 | ..... |

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for 1891-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905-6. | | | | | | | | | | | | |
| 1 | 18.0 | 18.4 | 28.05 | 17.75 | 18.6 | 19.0 | 24.2 | 24.75 | 28.6 | 26.5 | 20.35 | 18.8 |
| 2 | 18.0 | 18.45 | 24.05 | 17.7 | 18.55 | 19.0 | 23.9 | 25.1 | 28.6 | 25.55 | 20.3 | 19.0 |
| 3 | 18.3 | 18.5 | 23.95 | 17.7 | 18.55 | 19.0 | 23.8 | 25.0 | 28.8 | 24.35 | 20.2 | 19.2 |
| 4 | 18.8 | 18.4 | 22.9 | 17.6 | 18.45 | 19.0 | 24.0 | 24.7 | 28.6 | 23.35 | 20.0 | 19.1 |
| 5 | 19.0 | 18.35 | 21.3 | 17.55 | 18.2 | 18.95 | 23.4 | 24.55 | 28.3 | 22.85 | 20.15 | 18.85 |
| 6 | 18.95 | 18.35 | 20.5 | 17.4 | 18.3 | 18.9 | 23.2 | 24.55 | 27.95 | 22.4 | 20.0 | 18.7 |
| 7 | 20.05 | 18.4 | 20.0 | 17.4 | 18.2 | 18.95 | 22.95 | 24.4 | 27.6 | 22.0 | 19.7 | 18.7 |
| 8 | 20.2 | 18.65 | 19.5 | 17.5 | 18.2 | 18.95 | ...... | 24.2 | 27.4 | 21.9 | 19.4 | 18.7 |
| 9 | 20.6 | 18.75 | 19.2 | 17.45 | 18.2 | 18.9 | 22.45 | 23.95 | 27.4 | 21.85 | 19.3 | 18.65 |
| 10 | 20.3 | 18.8 | 18.95 | 17.5 | 18.2 | 18.85 | 22.9 | 23.8 | 27.45 | 21.85 | 19.2 | 18.75 |
| 11 | 20.1 | 18.8 | 18.75 | 17.5 | 18.7 | 18.85 | 22.7 | 23.8 | 27.3 | 21.8 | 19.55 | 18.8 |
| 12 | 19.95 | 19.0 | 18.45 | 17.5 | 18.55 | 18.85 | 22.65 | 24.25 | 27.1 | 21.55 | 19.4 | 18.85 |
| 13 | 19.7 | 18.75 | 18.4 | 17.4 | 18.7 | 18.9 | 22.6 | 24.3 | 26.9 | 21.4 | 19.4 | 18.8 |
| 14 | 19.3 | 18.65 | 18.3 | 17.4 | 18.8 | 20.2 | 22.45 | 24.5 | 26.7 | 21.3 | 19.4 | 18.8 |
| 15 | 19.2 | 18.75 | 18.2 | 17.4 | 18.9 | 26.2 | 22.9 | 24.9 | 26.75 | 21.1 | 19.2 | 18.7 |
| 16 | 19.1 | 18.85 | 18.2 | 17.4 | 19.95 | 27.55 | 22.7 | 25.4 | 26.95 | 20.95 | 19.2 | 18.7 |
| 17 | 18.9 | 18.85 | 18.0 | 17.4 | 20.0 | 25.5 | 22.4 | 25.85 | 26.95 | 20.95 | 19.1 | 18.65 |
| 18 | 18.75 | 18.8 | 17.95 | 17.4 | 19.8 | 23.2 | 22.4 | 26.2 | 26.9 | 21.25 | 19.1 | 18.6 |
| 19 | 18.7 | 18.95 | 17.9 | 17.4 | 19.6 | 22.65 | 22.55 | 26.45 | 26.8 | 21.5 | 19.5 | 18.4 |
| 20 | 18.7 | 18.9 | 17.95 | 17.45 | 19.4 | 22.85 | 22.45 | 26.8 | 26.7 | 21.2 | 19.25 | 18.35 |
| 21 | 18.65 | 18.8 | 17.8 | 17.4 | 19.4 | 22.05 | 22.4 | 27.1 | 26.75 | 21.35 | 19.9 | 18.45 |
| 22 | 18.6 | 18.8 | 17.85 | 17.5 | 19.4 | 21.7 | 22.4 | 27.2 | 26.85 | 21.5 | 19.3 | 18.6 |
| 23 | 18.6 | 18.8 | 17.85 | 19.5 | 19.3 | 21.6 | 22.7 | 27.3 | 27.3 | 21.6 | 19.25 | 18.6 |
| 24 | 18.6 | 18.7 | 17.9 | 19.4 | 19.3 | 21.5 | 22.9 | 27.2 | 27.6 | 21.5 | 19.2 | 18.4 |
| 25 | 18.6 | 18.75 | 17.85 | 19.6 | 19.2 | 21.35 | 23.1 | 27.2 | 27.8 | 21.4 | 19.8 | 18.7 |
| 26 | 18.5 | 18.8 | 17.95 | 19.0 | 19.1 | 21.2 | 23.5 | 27.3 | 27.85 | 21.4 | 19.45 | 19.1 |
| 27 | 18.4 | 19.05 | 17.9 | 18.8 | 19.0 | 23.1 | 23.55 | 27.5 | 28.10 | 21.2 | 19.15 | 18.8 |
| 28 | 18.35 | 21.3 | 17.8 | 18.75 | 19.0 | 26.0 | 23.8 | 27.6 | 28.05 | 21.1 | 18.9 | 18.7 |
| 29 | 18.4 | 26.2 | 17.8 | 18.75 | ...... | 27.95 | 24.2 | 27.8 | 27.85 | 20.9 | 19.5 | 18.8 |
| 30 | 18.45 | 31.3 | 17.8 | 18.7 | ...... | 25.0 | 24.5 | 28.2 | 27.3 | 20.7 | 19.2 | 19.0 |
| 31 | 18.4 | ...... | 17.8 | 18.7 | ...... | 23.8 | ...... | 28.4 | ...... | 20.5 | 18.9 | ...... |
| 1906-7. | | | | | | | | | | | | |
| 1 | 19.55 | 18.35 | 18.7 | 22.95 | 19.55 | 20.85 | 22.85 | 23.75 | 28.45 | 28.3 | 23.1 | 20.65 |
| 2 | 19.4 | 18.5 | 18.8 | 21.2 | 21.55 | 20.8 | 22.9 | 23.45 | 28.9 | 28.05 | 23.1 | 22.25 |
| 3 | 19.4 | 18.5 | 18.65 | 20.9 | 22.4 | 21.25 | 23.2 | 23.3 | 29.1 | 27.65 | 23.3 | 21.6 |
| 4 | 19.45 | 18.6 | 18.6 | 20.7 | 21.5 | 21.0 | 23.05 | 23.2 | 29.2 | 27.4 | 23.05 | 21.2 |
| 5 | 19.45 | 18.6 | 18.5 | 20.6 | 21.1 | 21.1 | 22.8 | 23.1 | 29.15 | 27.4 | 22.85 | 21.55 |
| 6 | 19.35 | 18.65 | 20.3 | 20.3 | 20.65 | 21.25 | 22.75 | 23.15 | 28.9 | 27.35 | 22.5 | 21.5 |
| 7 | 19.15 | 18.7 | 25.3 | 20.2 | 20.35 | 22.85 | 22.65 | 23.25 | 28.3 | 27.35 | 22.45 | 21.25 |
| 8 | 19.1 | 18.75 | 23.55 | 19.9 | 20.6 | 27.0 | 22.35 | 23.3 | 27.7 | 27.5 | 22.45 | 20.65 |
| 9 | 18.9 | 18.8 | 21.2 | 20.0 | 20.95 | 24.55 | 22.2 | 23.3 | 27.25 | 27.7 | 22.3 | 20.75 |
| 10 | 18.8 | 18.8 | 22.1 | 20.7 | 21.0 | 23.2 | 22.2 | 23.2 | 26.85 | 27.8 | 22.15 | 21.0 |
| 11 | 18.6 | 18.85 | 20.9 | 20.7 | 20.9 | 22.3 | 22.4 | 23.15 | 26.95 | 28.05 | 21.85 | 20.5 |
| 12 | 18.4 | 19.2 | 20.3 | 23.7 | 20.75 | 21.7 | 22.5 | 23.0 | 27.15 | 28.0 | 21.45 | 20.0 |
| 13 | 18.25 | 19.3 | 20.05 | 23.3 | 20.6 | 21.85 | 22.45 | 22.85 | 27.45 | 28.05 | 21.25 | 19.65 |
| 14 | 18.25 | 19.1 | 19.8 | 22.0 | 20.5 | 21.8 | 22.5 | 22.65 | 27.75 | 27.95 | 20.95 | 19.65 |
| 15 | 18.2 | 19.1 | 19.5 | 21.1 | 20.55 | 21.35 | 22.5 | 22.65 | 28.05 | 27.8 | 20.65 | 19.35 |
| 16 | 18.1 | 19.0 | 19.3 | 20.5 | 20.5 | 21.15 | 22.8 | 22.75 | 28.25 | 27.65 | 20.5 | 19.2 |
| 17 | 18.1 | 18.95 | 19.3 | 19.95 | 20.4 | 20.9 | 23.05 | 22.7 | 28.55 | 27.5 | 20.45 | 19.15 |
| 18 | 18.1 | 18.9 | 19.15 | 19.8 | 20.4 | 20.7 | 23.5 | 22.8 | 28.85 | 27.45 | 20.3 | 19.05 |
| 19 | 18.1 | 18.9 | 19.05 | 21.4 | 20.35 | 20.55 | 24.25 | 23.0 | 29.1 | 27.1 | 20.25 | 18.95 |
| 20 | 18.0 | 18.9 | 19.01 | 22.85 | 20.2 | 20.4 | 24.8 | 23.6 | 29.15 | 26.75 | 20.1 | 18.9 |
| 21 | 18.0 | 18.9 | 18.9 | 21.5 | 20.55 | 20.4 | 25.15 | 24.1 | 29.15 | 26.1 | 20.3 | 19.0 |
| 22 | 18.0 | 18.8 | 19.0 | 21.0 | 21.25 | 20.4 | 25.5 | 24.45 | 29.1 | 25.65 | 20.25 | 19.25 |
| 23 | 18.0 | 18.8 | 18.9 | 20.6 | 20.95 | 20.4 | 25.75 | 24.6 | 29.0 | 25.3 | 20.1 | 19.0 |
| 24 | 18.0 | 18.8 | 18.8 | 20.3 | 20.75 | 20.55 | 25.85 | 24.7 | 28.9 | 24.85 | 19.95 | 19.0 |
| 25 | 17.95 | 18.8 | 18.7 | 20.1 | 20.7 | 22.3 | 25.85 | 24.75 | 28.9 | 24.3 | 20.2 | 19.0 |
| 26 | 17.95 | 18.8 | 18.6 | 20.0 | 21.4 | 22.3 | 25.75 | 25.05 | 28.85 | 23.6 | 20.5 | 19.0 |
| 27 | 18.0 | 18.75 | 18.5 | 19.8 | 21.85 | 21.5 | 25.6 | 25.5 | 28.75 | 23.25 | 20.4 | 19.05 |
| 28 | 18.0 | 18.8 | 18.5 | 19.7 | 21.3 | 21.7 | 25.3 | 26.15 | 28.7 | 23.0 | 20.5 | 19.1 |
| 29 | 18.05 | 18.75 | 18.5 | 19.6 | ...... | 22.95 | 24.8 | 26.95 | 28.6 | 23.1 | 20.3 | 19.25 |
| 30 | 18.1 | 18.8 | 18.4 | 19.6 | ...... | 23.0 | 24.3 | 27.5 | 28.4 | 22.8 | 19.9 | 19.05 |
| 31 | 18.15 | ...... | 24.55 | 19.6 | ...... | 23.05 | ...... | 27.95 | ...... | 22.8 | 19.6 | ...... |

... 1931–1932—Continued

[illegible]

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for 1891-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909-10.** | | | | | | | | | | | | |
| 1 | 17.35 | 16.0 | 15.8 | 14.7 | 15.45 | 15.85 | 20.2 | 20.6 | 19.95 | 18.2 | 16.0 | 15.25 |
| 2 | 17.1 | 16.0 | 15.95 | 14.85 | 15.5 | 15.85 | 20.05 | 21.05 | 19.9 | 18.0 | 16.2 | 15.0 |
| 3 | 17.05 | 15.9 | 16.0 | 20.45 | 15.65 | 15.95 | 19.7 | 21.5 | 19.9 | 17.85 | 16.05 | 15.0 |
| 4 | 16.9 | 15.85 | 16.05 | 20.95 | 15.75 | 16.05 | 19.45 | 21.8 | 20.05 | 17.8 | 16.35 | 15.0 |
| 5 | 16.8 | 15.8 | 16.0 | 22.95 | 15.8 | 16.3 | 19.1 | 22.1 | 20.7 | 17.8 | 16.4 | 14.95 |
| 6 | 16.8 | 15.8 | 16.0 | 19.65 | 15.8 | 16.8 | 18.85 | 22.55 | 21.8 | 18.3 | 16.55 | 14.9 |
| 7 | 16.7 | 15.8 | 16.1 | 17.9 | 15.8 | 17.05 | 18.6 | 22.8 | 21.8 | 18.2 | 16.25 | 14.9 |
| 8 | 16.6 | 15.8 | 16.2 | 17.4 | 15.8 | 17.05 | 18.45 | 22.8 | 22.3 | 17.6 | 16.4 | 14.85 |
| 9 | 16.5 | 15.8 | 16.1 | 17.2 | 15.8 | 17.4 | 18.3 | 22.95 | 22.75 | 17.3 | 16.1 | 15.3 |
| 10 | 16.4 | 15.8 | 16.0 | 17.35 | 15.8 | 17.5 | 18.45 | 22.9 | 23.0 | 17.1 | 16.05 | 15.2 |
| 11 | 16.3 | 15.75 | 16.0 | 16.75 | 15.8 | 18.1 | 18.6 | 22.6 | 23.2 | 17.05 | 16.2 | 15.0 |
| 12 | 16.3 | 15.75 | 16.0 | 16.1 | 15.75 | 18.05 | 18.45 | 22.1 | 23.45 | 16.95 | 16.1 | 15.0 |
| 13 | 16.3 | 15.8 | 16.0 | 15.65 | 15.8 | 18.7 | 18.3 | 21.85 | 23.2 | 16.7 | 16.4 | 15.0 |
| 14 | 16.35 | 15.8 | 16.0 | 15.2 | 15.9 | 19.85 | 18.15 | 21.45 | 23.1 | 16.45 | 16.1 | 16.1 |
| 15 | 16.35 | 15.8 | 16.0 | 14.95 | 15.85 | 20.35 | 18.15 | 21.2 | 22.6 | 16.75 | 15.85 | 15.75 |
| 16 | 16.5 | 15.9 | 15.7 | 14.7 | 15.9 | 20.25 | 18.2 | 21.25 | 22.1 | 16.55 | 15.8 | 15.65 |
| 17 | 16.45 | 15.95 | 15.5 | 14.9 | 15.9 | 19.8 | 18.35 | 21.6 | 21.6 | 16.25 | 15.85 | 15.45 |
| 18 | 16.4 | 15.9 | 15.3 | 15.0 | 15.8 | 19.3 | 18.5 | 21.9 | 21.2 | 16.2 | 15.95 | 15.35 |
| 19 | 16.45 | 15.9 | 15.25 | 15.7 | 15.7 | 18.85 | 18.7 | 22.05 | 20.95 | 16.1 | 15.95 | 15.3 |
| 20 | 16.4 | 15.9 | 15.2 | 15.75 | 15.8 | 18.6 | 18.9 | 22.55 | 20.55 | 16.1 | 15.75 | 15.4 |
| 21 | 16.4 | 15.95 | 15.15 | 16.35 | 15.85 | 18.4 | 19.15 | 22.85 | 20.35 | 16.1 | 15.55 | 15.55 |
| 22 | 16.4 | 15.9 | 15.2 | 16.15 | 15.9 | 18.3 | 19.25 | 23.1 | 20.1 | 16.0 | 15.4 | 15.5 |
| 23 | 16.4 | 15.9 | 15.25 | 16.4 | 15.8 | 18.25 | 19.15 | 23.0 | 19.9 | 16.0 | 15.4 | 15.25 |
| 24 | 16.3 | 15.95 | 15.3 | 16.95 | 15.85 | 18.2 | 19.1 | 23.0 | 19.7 | 15.9 | 15.5 | 15.5 |
| 25 | 16.3 | 16.05 | 15.3 | 16.35 | 15.95 | 18.25 | 19.25 | 22.55 | 19.35 | 15.95 | 15.5 | 15.4 |
| 26 | 16.3 | 16.0 | 15.3 | 16.1 | 16.05 | 18.45 | 19.15 | 21.95 | 19.05 | 16.0 | 15.55 | 15.45 |
| 27 | 16.3 | 16.0 | 15.15 | 15.95 | 16.15 | 18.5 | 19.5 | 21.4 | 19.0 | 15.85 | 15.5 | 15.5 |
| 28 | 16.25 | 15.95 | 15.0 | 15.9 | 16.0 | 18.85 | 19.95 | 21.0 | 18.75 | 15.7 | 15.55 | 15.6 |
| 29 | 16.1 | 15.95 | 14.9 | 15.8 | ....... | 19.3 | 20.15 | 20.7 | 18.7 | 15.7 | 15.15 | 15.8 |
| 30 | 16.0 | 15.85 | 14.75 | 15.55 | ....... | 19.75 | 20.35 | 20.45 | 18.3 | 15.65 | 15.35 | 15.5 |
| 31 | 16.0 | ....... | 14.6 | 15.5 | ....... | 20.1 | ....... | 20.1 | ....... | 15.6 | 15.2 | ...... |
| **1910-11.** | | | | | | | | | | | | |
| 1 | 15.6 | 16.2 | 16.4 | 16.15 | 16.85 | 16.65 | 18.55 | 19.9 | 22.2 | 24.6 | 21.5 | 17.9 |
| 2 | 15.5 | 16.2 | 16.4 | 15.7 | 16.75 | 16.5 | 18.8 | 20.0 | 22.85 | 24.4 | 20.95 | 17.55 |
| 3 | 15.5 | 16.3 | 16.3 | 15.8 | 17.15 | 16.4 | 18.85 | 20.0 | 22.5 | 24.25 | 20.3 | 17.6 |
| 4 | 15.55 | 16.2 | 16.2 | 15.8 | 17.45 | 16.4 | 18.8 | 20.15 | 22.6 | 23.8 | 19.7 | 17.6 |
| 5 | 15.6 | 16.35 | 16.2 | 15.75 | 18.1 | 16.4 | 18.65 | 20.4 | 22.65 | 22.9 | 19.2 | 17.7 |
| 6 | 15.5 | 16.2 | 16.2 | 15.7 | 17.9 | 16.3 | 19.0 | 20.9 | 22.6 | 22.0 | 18.8 | 17.3 |
| 7 | 15.45 | 16.2 | 16.3 | 15.7 | 19.6 | 16.2 | 18.6 | 21.2 | 22.8 | 21.6 | 18.35 | 17.05 |
| 8 | 15.4 | 16.2 | 16.3 | 15.7 | 19.25 | 16.2 | 19.0 | 21.05 | 22.9 | 21.7 | 18.1 | 16.8 |
| 9 | 15.55 | 16.2 | 16.4 | 15.4 | 18.45 | 16.3 | 18.9 | 20.9 | 23.0 | 22.0 | 17.85 | 16.6 |
| 10 | 15.45 | 16.2 | 16.35 | 15.0 | 18.6 | 18.5 | 19.25 | 21.0 | 23.25 | 22.2 | 18.0 | 16.5 |
| 11 | 15.35 | 16.2 | 16.4 | 15.0 | 20.0 | 17.65 | 19.35 | 20.85 | 23.5 | 22.05 | 18.15 | 16.4 |
| 12 | 15.25 | 16.2 | 16.2 | 15.1 | 19.35 | 18.0 | 19.55 | 21.2 | 23.55 | 21.6 | 18.1 | 16.45 |
| 13 | 15.2 | 16.2 | 16.2 | 16.0 | 18.7 | 20.0 | 19.75 | 21.5 | 23.8 | 21.3 | 18.15 | 16.45 |
| 14 | 15.3 | 16.2 | 16.2 | 15.95 | 18.25 | 21.35 | 19.85 | 21.85 | 23.9 | 21.1 | 18.0 | 16.6 |
| 15 | 15.5 | 16.5 | 16.2 | 17.45 | 17.8 | 19.95 | 19.7 | 22.25 | 24.05 | 20.95 | 17.8 | 16.55 |
| 16 | 15.5 | 16.65 | 16.2 | 16.7 | 17.55 | 19.25 | 19.45 | 22.9 | 24.3 | 20.35 | 17.65 | 16.55 |
| 17 | 15.3 | 16.45 | 16.2 | 15.95 | 17.4 | 19.45 | 19.25 | 23.3 | 24.4 | 20.2 | 17.55 | 16.45 |
| 18 | 15.4 | 16.4 | 16.2 | 15.9 | 17.0 | 19.85 | 19.1 | 23.6 | 24.75 | 20.4 | 17.5 | 16.5 |
| 19 | 15.4 | 16.3 | 16.1 | 17.8 | 16.7 | 20.5 | 18.9 | 23.9 | 24.75 | 20.35 | 17.5 | 16.35 |
| 20 | 15.4 | 16.3 | 16.0 | 18.0 | 16.6 | 20.3 | 18.9 | 23.9 | 25.05 | 20.8 | 17.5 | 16.6 |
| 21 | 15.8 | 16.3 | 16.0 | 17.75 | 16.55 | 20.05 | 18.8 | 23.75 | 25.25 | 20.9 | 17.25 | 17.5 |
| 22 | 15.95 | 16.05 | 16.0 | 17.55 | 16.45 | 19.6 | 18.65 | 23.4 | 25.45 | 21.15 | 17.05 | 17.0 |
| 23 | 15.8 | 16.3 | 16.1 | 17.3 | 16.3 | 19.0 | 18.4 | 23.15 | 25.6 | 21.25 | 17.0 | 16.75 |
| 24 | 16.65 | 16.35 | 16.2 | 16.9 | 16.5 | 18.6 | 18.3 | 23.0 | 25.85 | 21.0 | 17.1 | 16.6 |
| 25 | 16.55 | 16.6 | 16.2 | 16.8 | 16.5 | 18.4 | 18.5 | 23.0 | 25.65 | 21.15 | 17.1 | 16.6 |
| 26 | 16.8 | 16.8 | 16.25 | 17.0 | 16.35 | 18.2 | 18.6 | 23.2 | 25.45 | 22.4 | 17.05 | 16.6 |
| 27 | 16.35 | 16.6 | 16.3 | 16.85 | 16.5 | 18.1 | 18.65 | 23.2 | 25.25 | 22.85 | 17.05 | 17.25 |
| 28 | 16.25 | 16.3 | 16.3 | 16.7 | 16.55 | 18.0 | 18.9 | 23.3 | 24.95 | 22.55 | 17.25 | 17.8 |
| 29 | 16.35 | 16.3 | 16.0 | 16.9 | ....... | 18.2 | 19.2 | 23.15 | 24.8 | 22.2 | 17.45 | 17.05 |
| 30 | 16.2 | 16.3 | 16.05 | 17.3 | ....... | 18.3 | 19.55 | 22.6 | 24.7 | 22.75 | 18.0 | 16.75 |
| 31 | 16.2 | ....... | 16.0 | 16.95 | ....... | 18.4 | ....... | 22.4 | ....... | 21.95 | 18.45 | ...... |

*Daily gage height, in feet, of Colorado River at Yuma, Ariz., for 1891–1912—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 16.75 | 17.0 | 17.05 | 16.6 | 17.45 | 17.5 | 18.45 | 18.65 | 25.6 |
| 2 | 16.6 | 17.1 | 17.1 | 16.45 | 17.4 | 17.5 | 18.3 | 18.8 | 26.0 |
| 3 | 17.85 | 17.45 | 17.05 | 16.15 | 17.35 | 17.45 | 18.2 | 19.4 | 26.5 |
| 4 | 18.9 | 18.2 | 17.1 | 16.0 | 17.05 | 17.6 | 18.15 | 19.45 | 27.1 |
| 5 | 18.95 | 18.1 | 17.1 | 15.9 | 17.0 | 17.6 | 18.1 | 19.35 | 27.6 |
| 6 | 20.6 | 17.75 | 17.1 | 15.7 | 17.05 | 17.5 | 18.05 | 19.4 | 28.05 |
| 7 | 21.05 | 17.6 | 17.0 | 15.65 | 17.1 | 17.5 | 18.0 | 19.9 | 28.35 |
| 8 | 21.0 | 17.4 | 16.95 | 15.7 | 17.1 | 17.55 | 18.25 | 20.9 | 28.4 |
| 9 | 21.1 | 17.2 | 17.05 | 15.55 | 17.1 | 17.5 | 18.45 | 21.5 | 28.5 |
| 10 | 21.65 | 17.2 | 16.55 | 15.4 | 17.1 | 17.55 | 18.6 | 21.65 | 28.45 |
| 11 | 22.35 | 17.1 | 16.3 | 15.25 | 17.1 | 17.6 | 18.8 | 21.45 | 28.3 |
| 12 | 22.9 | 17.05 | 16.15 | 15.05 | 17.1 | 18.55 | 19.2 | 21.25 | 28.2 |
| 13 | 23.5 | 17.0 | 16.15 | 15.0 | 17.1 | 18.2 | 19.75 | 20.9 | 28.0 |
| 14 | 24.1 | 17.0 | 16.15 | 15.1 | 17.15 | 18.5 | 20.2 | 21.05 | 27.9 |
| 15 | 23.75 | 16.9 | 16.45 | 15.5 | 17.2 | 18.8 | 20.6 | 21.45 | 27.95 |
| 16 | 21.45 | 16.9 | 16.6 | 15.25 | 17.5 | 19.3 | 21.0 | 21.8 | 27.95 |
| 17 | 20.0 | 16.95 | 16.8 | 15.3 | 17.15 | 18.35 | 21.35 | 22.0 | 28.15 |
| 18 | 19.3 | 16.95 | 17.1 | 15.5 | 17.3 | 18.35 | 21.4 | 22.1 | 28.5 |
| 19 | 18.9 | 17.05 | 17.2 | 15.8 | 17.4 | 18.35 | 21.1 | 22.45 | 28.7 |
| 20 | 18.45 | 17.05 | 17.0 | 16.15 | 17.4 | 18.2 | 20.55 | 22.65 | 28.9 |
| 21 | 18.1 | 17.0 | 17.0 | 16.35 | 17.4 | 18.05 | 20.05 | 22.7 | 29.0 |
| 22 | 17.7 | 17.05 | 17.0 | 16.5 | 17.4 | 17.95 | 19.85 | 22.5 | 29.05 |
| 23 | 17.4 | 17.05 | 16.8 | 16.85 | 17.4 | 18.4 | 19.5 | 22.5 | 28.35 |
| 24 | 17.35 | 17.1 | 16.8 | 16.95 | 17.4 | 18.1 | 19.35 | 22.85 | 26.8 |
| 25 | 17.25 | 16.9 | 16.6 | 17.25 | 17.2 | 18.05 | 19.2 | 23.2 | 25.45 |
| 26 | 17.1 | 17.0 | 16.65 | 17.5 | 17.3 | 18.0 | 19.2 | 23.75 | 24.35 |
| 27 | 17.0 | 17.0 | 16.8 | 17.6 | 17.35 | 18.8 | 19.05 | 24.1 | 23.5 |
| 28 | 17.15 | 17.0 | 16.7 | 17.45 | 17.4 | 19.9 | 18.9 | 24.35 | 22.85 |
| 29 | 17.35 | 17.0 | 16.6 | 17.4 | 17.5 | 19.6 | 18.7 | 24.65 | 22.75 |
| 30 | 17.15 | 17.05 | 16.7 | 17.4 | ........ | 19.05 | 18.65 | 25.05 | 22.75 |
| 31 | 17.05 | ........ | 16.45 | 17.4 | ........ | 18.7 | ........ | 25.6 | ........ |

*Yearly maximum and minimum gage heights, in feet, of Colorado River at Yuma, Ariz., 1878 to 1891.*

[Compiled from the records of Capt. Isaac Polhamus, the Southern Pacific Railroad, and the U. S. Geological Survey.]

| Year. | Maximum. | | Minimum. | | Year. | Maximum. | | Minimum. | |
|---|---|---|---|---|---|---|---|---|---|
| | Height. | Date. | Height. | Date. | | Height. | Date. | Height. | Date. |
| 1878 | 23.0 | June 24 | 14.7 | Dec. 31 | 1885 | 24.7 | June 13 | 13.7 | Feb. 5 |
| 1879 | 20.0 | May 12 | 13.2 | Oct 14 | 1886 | 26.8 | June 6 | 14.4 | Jan. 19 |
| 1880 | 24.0 | May 31 | 14.9 | Dec. 8 | 1887 | 23.5 | June 10 | 14.9 | Jan. 26 |
| 1881 | 23.5 | June 14 | 15.0 | Jan. 25 | 1888 | 21.8 | June 25 | 14.8 | Jan. 4 |
| 1882 | 22.6 | June 18 | 15.5 | Dec. 20 | 1889 | 22.4 | June 7 | 15.4 | Sept. 27 |
| 1883 | 24.5 | July 3 | 14.0 | Dec. 14 | 1890 | 25.5 | June 5 | 16.4 | Jan. 29 |
| 1884 | [a] 28.5 | June 27 | 14.2 | Dec. 5 | 1891 | [b] 33.2 | Feb. 26 | 16.4 | Sept. 22 |

[a] Said to be highest flood for 17 years preceding.

[b] Highest flood recorded.

*Rating table for Colorado River at Yuma, Ariz., for January 1 to October 10, 1902.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 16.5 | 3,030 | 18.2 | 4,920 | 20.4 | 13,800 | 22.6 | 33,400 |
| 16.6 | 3,050 | 18.4 | 5,340 | 20.6 | 15,200 | 22.8 | 35,800 |
| 16.7 | 3,080 | 18.6 | 5,790 | 20.8 | 16,600 | 23.0 | 38,200 |
| 16.8 | 3,120 | 18.8 | 6,310 | 21.0 | 18,200 | 23.2 | 40,800 |
| 16.9 | 3,170 | 19.0 | 6,910 | 21.2 | 19,800 | 23.4 | 43,400 |
| 17.0 | 3,230 | 19.2 | 7,590 | 21.4 | 21,500 | 23.6 | 46,100 |
| 17.2 | 3,380 | 19.4 | 8,360 | 21.6 | 23,300 | 23.8 | 48,900 |
| 17.4 | 3,580 | 19.6 | 9,300 | 21.8 | 25,100 | 24.0 | 51,700 |
| 17.6 | 3,850 | 19.8 | 10,300 | 22.0 | 27,000 | 24.2 | 54,700 |
| 17.8 | 4,160 | 20.0 | 11,400 | 22.2 | 29,000 | 24.4 | 57,700 |
| 18.0 | 4,520 | 20.2 | 12,600 | 22.4 | 31,200 | ........ | .......... |

*Daily discharge, in second-feet, of Colorado River at Yuma, Ariz., for 1905–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | | | | |
| 1 | 3,750 | 5,800 | 29,070 | 20,690 | 41,520 | 61,500 | 57,800 | 16,400 | 6,440 |
| 2 | 3,750 | 6,054 | 39,260 | 20,100 | 39,700 | 65,300 | 55,500 | 15,790 | 6,280 |
| 3 | 3,800 | 6,500 | 70,170 | 19,480 | 39,700 | 68,160 | 50,640 | 14,700 | 6,250 |
| 4 | 3.985 | 6,632 | 70,200 | 19,450 | 37,280 | 67,900 | 45,000 | 13,560 | 6,464 |
| 5 | 4,300 | 9,800 | 51,100 | 21,000 | 37,100 | 67,600 | 44,950 | 12,900 | 6,160 |
| 6 | 4,570 | 16,590 | 44,310 | 30,100 | 37,410 | 67,600 | 42,400 | 14,200 | 5,644 |
| 7 | 4,700 | 9,400 | 44,100 | 29,840 | 38,000 | 69,500 | 40,100 | 15,940 | 5,060 |
| 8 | 4,500 | 62,080 | 43,100 | 25,800 | 40,050 | 72,930 | 37,200 | 17,450 | 5,560 |
| 9 | 4,170 | 82,820 | 36,400 | 24,800 | 46,000 | 70,300 | 35,500 | 16,770 | 6,051 |
| 10 | 16,090 | 52,580 | 34,400 | 24,900 | 49,200 | 69,600 | 32,980 | 16,200 | 8,000 |
| 11 | 6,400 | 37,320 | 38,620 | 23,000 | 52,000 | 71,000 | 32,100 | 16,960 | 7,631 |
| 12 | 6,300 | 29,700 | 42,000 | 26,100 | 48,000 | 72,590 | 31,720 | 16,900 | 6,900 |
| 13 | 6,350 | 22,800 | 38,870 | 45,800 | 38,840 | 76,000 | 30,870 | 16,150 | 7,706 |
| 14 | 7,000 | 21,900 | 32,000 | 93,800 | 37,800 | 82,020 | 29,500 | 15,960 | 9,667 |
| 15 | 8,370 | 22,500 | 36,720 | 97,500 | 37,300 | 82,000 | 27,710 | 14,500 | 8,900 |
| 16 | 8,600 | 18,610 | 60,640 | 70,100 | 37,320 | 83,000 | 28,300 | 13,800 | 7,700 |
| 17 | 20,100 | 14,600 | 65,820 | 45,000 | 37,000 | 86,000 | 31,100 | 11,900 | 7,000 |
| 18 | 27,500 | 16,490 | 62,400 | 43,600 | 33,910 | 88,500 | 25,300 | 10,300 | 6,743 |
| 19 | 19,300 | 31,500 | 73,440 | 45,050 | 34,200 | 94,320 | 22,320 | 9,757 | 6,720 |
| 20 | 12,120 | 47,000 | 110,840 | 43,400 | 34,580 | 91,500 | 22,250 | 9,350 | 7,131 |
| 21 | 9,300 | 54,200 | 103,500 | 39,500 | 35,700 | 92,400 | 22,000 | 8,690 | 6,700 |
| 22 | 10,170 | 54,730 | 91,200 | 35,900 | 37,000 | 92,390 | 21,500 | 8,100 | 6,080 |
| 23 | 7,863 | 32,990 | 76,930 | 33,900 | 38,390 | 89,800 | 20,900 | 7,796 | 6,063 |
| 24 | 7,900 | 21,990 | 58,600 | 31,690 | 41,500 | 84,800 | 20,800 | 7,550 | 5,890 |
| 25 | 7,025 | 18,850 | 43,050 | 33,000 | 43,700 | 82,000 | 20,650 | 7,380 | 5,740 |
| 26 | 6,770 | 30,500 | 34,600 | 37,160 | 45,290 | 77,610 | 20,460 | 7,241 | 5,260 |
| 27 | 6,250 | 27,730 | 31,020 | 41,630 | 47,600 | 73,500 | 19,700 | 7,240 | 5,270 |
| 28 | 5,730 | 25,000 | 29,500 | 39,000 | 51,100 | 68,500 | 18,910 | 7,013 | 5,280 |
| 29 | 5,400 | ........ | 26,900 | 34,990 | 54,810 | 64,370 | 17,200 | 6,850 | 5,287 |
| 30 | 5,070 | ........ | 24,390 | 38,700 | 56,300 | 61,500 | 17,500 | 10,290 | 5,260 |
| 31 | 4,900 | ........ | 23,500 | ........ | 59,020 | ........ | 16,750 | 7,500 | ........ |

*Daily discharge, in second-feet, of Colorado River at Yuma, Ariz., for 1905–1912—Contd.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1905-6.** | | | | | | | | | | | | |
| 1 | 5,240 | 5,620 | 77,300 | 5,860 | 9,280 | 9,350 | 39,600 | 46,900 | 81,800 | 74,200 | 25,600 | 12,700 |
| 2 | 5,220 | 5,720 | 37,160 | 5,800 | 9,100 | 9,210 | 37,600 | 50,800 | 84,000 | 68,000 | 25,560 | 13,300 |
| 3 | 6,140 | 5,810 | 40,200 | 5,730 | 9,000 | 9,000 | 37,500 | 48,600 | 84,200 | 60,400 | 25,200 | 14,300 |
| 4 | 7,170 | 5,750 | 35,000 | 5,640 | 8,500 | 8,900 | 38,000 | 43,400 | 87,200 | 52,200 | 24,500 | 13,400 |
| 5 | 8,250 | 5,700 | 28,650 | 5,580 | 7,280 | 8,750 | 37,800 | 40,600 | 92,400 | 48,100 | 24,900 | 12,500 |
| 6 | 7,300 | 5,710 | 23,300 | 5,400 | 7,500 | 8,600 | 35,900 | 41,000 | 91,100 | 44,600 | 24,400 | 12,100 |
| 7 | 13,080 | 5,960 | 20,100 | 5,280 | 6,800 | 8,350 | 33,400 | 38,500 | 89,800 | 41,900 | 21,900 | 12,000 |
| 8 | 13,560 | 6,360 | 16,970 | 5,230 | 6,600 | 8,000 | 31,000 | 36,800 | 89,000 | 41,100 | 21,900 | 11,700 |
| 9 | 15,500 | 6,630 | 15,000 | 5,090 | 6,360 | 7,730 | 27,200 | 36,000 | 86,700 | 40,400 | 22,000 | 11,900 |
| 10 | 14,060 | 6,680 | 13,700 | 4,950 | 6,450 | 7,300 | 32,200 | 35,100 | 85,300 | 39,500 | 21,900 | 11,800 |
| 11 | 12,950 | 6,550 | 12,620 | 4,930 | 8,860 | 6,980 | 29,800 | 36,700 | 82,100 | 38,600 | 20,500 | 11,800 |
| 12 | 12,100 | 6,950 | 10,500 | 4,700 | 8,220 | 6,740 | 29,200 | 42,100 | 74,000 | 40,600 | 19,700 | 11,900 |
| 13 | 16,660 | 6,310 | 10,200 | 4,550 | 8,840 | 7,060 | 29,000 | 42,800 | 65,800 | 38,100 | 19,500 | 11,900 |
| 14 | 9,100 | 6,050 | 9,610 | 4,500 | 9,250 | 15,600 | 27,800 | 44,000 | 65,000 | 37,400 | 19,200 | 11,700 |
| 15 | 8,650 | 6,500 | 9,100 | 4,450 | 9,640 | 54,300 | 31,200 | 46,500 | 70,000 | 36,300 | 16,900 | 10,700 |
| 16 | 8,290 | 6,790 | 8,800 | 4,400 | 14,600 | 66,700 | 29,500 | 48,900 | 80,600 | 35,400 | 16,800 | 10,700 |
| 17 | 7,500 | 6,640 | 8,100 | 4,350 | 14,800 | 42,300 | 27,200 | 51,100 | 80,600 | 34,600 | 16,600 | 10,700 |
| 18 | 6,950 | 6,560 | 7,810 | 4,300 | 13,500 | 36,000 | 27,200 | 52,800 | 80,800 | 32,900 | 16,500 | 10,500 |
| 19 | 6,750 | 6,320 | 7,750 | 4,200 | 12,200 | 33,200 | 28,200 | 55,900 | 80,400 | 32,600 | 17,500 | 9,900 |
| 20 | 6,700 | 6,240 | 7,720 | 4,600 | 11,000 | 33,500 | 26,100 | 60,200 | 80,100 | 32,400 | 16,400 | 9,600 |
| 21 | 6,400 | 6,320 | 7,670 | 4,400 | 10,800 | 24,600 | 25,800 | 64,200 | 79,800 | 32,200 | 18,500 | 10,200 |
| 22 | 6,100 | 6,400 | 7,640 | 5,000 | 10,700 | 23,300 | 25,500 | 66,000 | 80,400 | 31,800 | 18,100 | 10,900 |
| 23 | 6,020 | 6,500 | 7,600 | 16,100 | 10,300 | 22,800 | 29,000 | 67,700 | 83,000 | 31,600 | 15,800 | 11,000 |
| 24 | 6,000 | 6,520 | 7,560 | 14,000 | 10,200 | 22,400 | 30,600 | 68,900 | 91,000 | 32,300 | 15,500 | 10,300 |
| 25 | 5,970 | 6,550 | 7,540 | 13,800 | 9,880 | 21,200 | 31,700 | 69,200 | 96,600 | 33,000 | 17,900 | 11,700 |
| 26 | 5,750 | 6,580 | 7,500 | 11,000 | 9,550 | 19,000 | 36,200 | 69,700 | 96,400 | 32,400 | 16,400 | 13,200 |
| 27 | 5,510 | 6,650 | 7,200 | 10,000 | 9,250 | 43,800 | 36,700 | 70,600 | 99,200 | 30,800 | 15,200 | 12,100 |
| 28 | 5,400 | 21,500 | 6,700 | 9,940 | 9,190 | 65,600 | 38,600 | 71,200 | 97,100 | 29,100 | 14,300 | 11,700 |
| 29 | 5,540 | 62,500 | 6,400 | 9,830 | ....... | 75,000 | 41,800 | 73,500 | 92,000 | 29,100 | 16,400 | 12,200 |
| 30 | 5,670 | 102,700 | 5,980 | 9,740 | ....... | 47,500 | 44,100 | 77,300 | 79,300 | 29,100 | 15,000 | 13,300 |
| 31 | 5,580 | ....... | 5,900 | 9,600 | ....... | 34,700 | ....... | 79,800 | ....... | 27,000 | 13,400 | ....... |
| **1906-7.** | | | | | | | | | | | | |
| 1 | 15,900 | 8,630 | 9,080 | 38,400 | 12,400 | 17,200 | 29,300 | 35,500 | 72,900 | 113,000 | 57,500 | 31,100 |
| 2 | 15,000 | 9,310 | 9,080 | 26,900 | 25,700 | 16,900 | 29,900 | 32,600 | 76,200 | 111,000 | 58,500 | 43,300 |
| 3 | 14,700 | 9,150 | 9,080 | 25,000 | 31,300 | 19,300 | 32,100 | 31,200 | 77,000 | 110,000 | 61,900 | 38,400 |
| 4 | 15,100 | 9,270 | 9,000 | 21,600 | 26,600 | 18,000 | 30,700 | 32,400 | 77,700 | 110,000 | 58,200 | 35,400 |
| 5 | 15,200 | 8,700 | 8,470 | 18,800 | 24,400 | 18,500 | 28,500 | 31,800 | 77,400 | 110,000 | 55,300 | 38,000 |
| 6 | 15,800 | 8,430 | 17,800 | 16,000 | 19,200 | 19,300 | 29,200 | 33,000 | 87,100 | 107,000 | 51,200 | 37,600 |
| 7 | 15,000 | 9,000 | 60,000 | 15,200 | 17,700 | 28,600 | 28,900 | 33,700 | 83,300 | 107,000 | 50,600 | 34,500 |
| 8 | 14,900 | 9,420 | 43,900 | 16,100 | 19,000 | 68,700 | 27,100 | 33,900 | 80,100 | 108,000 | 50,600 | 35,500 |
| 9 | 14,500 | 9,700 | 27,900 | 15,900 | 20,500 | 45,100 | 24,700 | 33,900 | 77,200 | 110,000 | 50,300 | 31,900 |
| 10 | 14,300 | 9,650 | 38,700 | 18,400 | 20,800 | 34,500 | 24,700 | 33,500 | 72,200 | 110,000 | 49,900 | 33,300 |
| 11 | 13,300 | 9,800 | 27,400 | 18,200 | 20,300 | 27,300 | 27,400 | 32,800 | 72,700 | 112,000 | 46,200 | 27,600 |
| 12 | 11,800 | 11,600 | 23,400 | 44,300 | 18,900 | 24,700 | 28,000 | 30,600 | 81,800 | 112,000 | 41,300 | 24,200 |
| 13 | 10,900 | 12,500 | 21,600 | 40,900 | 17,400 | 25,800 | 25,900 | 30,400 | 86,500 | 114,000 | 38,300 | 21,900 |
| 14 | 10,800 | 11,000 | 19,800 | 29,700 | 16,600 | 25,400 | 26,000 | 29,500 | 90,400 | 113,000 | 33,900 | 21,900 |
| 15 | 10,500 | 11,500 | 17,500 | 24,400 | 17,000 | 21,100 | 26,000 | 29,100 | 94,400 | 114,000 | 29,500 | 19,600 |
| 16 | 10,700 | 11,400 | 15,900 | 20,400 | 16,600 | 19,200 | 28,100 | 30,000 | 97,100 | 114,000 | 32,200 | 18,400 |
| 17 | 10,800 | 10,500 | 15,800 | 17,100 | 14,900 | 17,600 | 29,500 | 29,600 | 101,000 | 110,000 | 32,900 | 17,700 |
| 18 | 10,800 | 10,200 | 14,540 | 16,300 | 11,900 | 16,200 | 33,000 | 28,600 | 105,000 | 109,000 | 29,700 | 16,300 |
| 19 | 10,700 | 9,900 | 13,800 | 25,200 | 14,700 | 15,600 | 38,200 | 29,600 | 106,000 | 104,000 | 28,600 | 14,900 |
| 20 | 10,500 | 9,750 | 13,200 | 33,400 | 14,100 | 14,800 | 41,500 | 31,900 | 106,000 | 102,000 | 25,400 | 14,200 |
| 21 | 10,100 | 9,850 | 12,300 | 25,800 | 15,500 | 14,800 | 43,800 | 34,700 | 106,000 | 94,900 | 29,200 | 15,500 |
| 22 | 10,000 | 9,500 | 12,800 | 23,900 | 18,400 | 14,800 | 46,900 | 37,500 | 108,000 | 92,000 | 26,800 | 16,500 |
| 23 | 9,800 | 9,330 | 12,000 | 22,100 | 17,200 | 14,800 | 48,300 | 38,700 | 110,000 | 88,900 | 25,700 | 14,100 |
| 24 | 9,500 | 9,230 | 11,300 | 18,000 | 15,400 | 15,900 | 49,900 | 39,300 | 112,000 | 82,400 | 24,500 | 13,900 |
| 25 | 9,500 | 8,900 | 11,000 | 15,200 | 15,000 | 28,400 | 56,500 | 41,300 | 113,000 | 76,800 | 25,800 | 13,400 |
| 26 | 9,300 | 8,670 | 10,600 | 15,000 | 19,600 | 28,400 | 49,300 | 45,700 | 114,000 | 68,800 | 27,300 | 13,100 |
| 27 | 9,000 | 8,700 | 9,500 | 13,800 | 22,600 | 20,200 | 45,700 | 51,000 | 115,000 | 62,700 | 28,300 | 13,200 |
| 28 | 8,400 | 9,210 | 8,870 | 13,200 | 19,000 | 21,700 | 46,200 | 57,900 | 115,000 | 58,900 | 27,300 | 13,400 |
| 29 | 8,600 | 9,000 | 8,000 | 12,700 | ....... | 30,800 | 44,600 | 61,900 | 115,000 | 58,600 | 25,000 | 14,000 |
| 30 | 8,600 | 9,080 | 8,800 | 12,700 | ....... | 31,200 | 43,500 | 65,300 | 115,000 | 52,400 | 23,900 | 13,200 |
| 31 | 8,600 | ....... | 48,900 | 12,700 | ....... | 31,600 | ....... | 68,800 | ....... | 55,400 | 23,100 | ....... |

*Daily discharge, in second-feet, of Colorado River at Yuma, Ariz., for 1905–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 12,000 | 16,300 | 8,800 | 5,800 | 6,300 | 13,400 | 15,900 | 32,000 | 32,200 | 53,800 | 18,600 | 17,300 |
| 2 | 11,600 | 14,300 | 8,600 | 6,100 | 6,300 | 12,500 | 16,400 | 30,000 | 31,300 | 53,000 | 22,400 | 19,200 |
| 3 | 11,300 | 12,900 | 8,500 | 6,100 | 6,500 | 11,700 | 15,800 | 29,500 | 30,300 | 49,800 | 22,700 | 19,300 |
| 4 | 10,300 | 12,900 | 8,100 | 6,400 | 6,900 | 16,000 | 14,600 | 28,500 | 30,600 | 53,100 | 21,800 | 16,600 |
| 5 | 10,300 | 12,500 | 7,800 | 7,000 | 7,400 | 16,500 | 14,300 | 27,100 | 30,900 | 52,400 | 21,400 | 14,000 |
| 6 | 10,100 | 11,900 | 7,900 | 7,200 | 9,500 | 14,000 | 13,900 | 25,400 | 30,000 | 49,300 | 24,900 | 12,700 |
| 7 | 10,200 | 11,800 | 8,000 | 7,300 | 45,000 | 13,400 | 13,500 | 24,100 | 31,200 | 45,000 | 25,200 | 14,100 |
| 8 | 10,300 | 11,800 | 7,800 | 7,400 | 30,000 | 33,000 | 13,100 | 23,200 | 33,500 | 41,100 | 29,500 | 13,600 |
| 9 | 11,500 | 11,800 | 7,500 | 7,400 | 19,000 | 27,000 | 13,400 | 23,100 | 33,900 | 37,300 | 36,100 | 16,400 |
| 10 | 12,200 | 11,600 | 7,600 | 7,200 | 15,000 | 20,900 | 12,900 | 23,300 | 34,300 | 35,400 | 31,900 | 13,600 |
| 11 | 12,200 | 11,200 | 7,700 | 6,900 | 14,200 | 18,700 | 13,000 | 24,500 | 34,800 | 33,900 | 30,100 | 11,800 |
| 12 | 15,900 | 10,900 | 7,900 | 6,800 | 14,200 | 24,700 | 13,200 | 25,200 | 35,200 | 33,100 | 28,200 | 11,000 |
| 13 | 15,600 | 10,800 | 7,800 | 6,700 | 14,800 | 18,500 | 13,400 | 25,100 | 36,000 | 31,200 | 23,700 | 12,600 |
| 14 | 15,500 | 10,700 | 7,700 | 6,700 | 14,900 | 15,200 | 14,000 | 25,000 | 35,600 | 29,100 | 24,000 | 10,300 |
| 15 | 13,500 | 10,500 | 7,500 | 6,400 | 14,800 | 15,000 | 14,100 | 23,000 | 38,700 | 29,800 | 21,800 | 9,900 |
| 16 | 13,500 | 10,200 | 7,300 | 5,900 | 14,600 | 14,300 | 14,000 | 23,500 | 40,200 | 29,100 | 20,900 | 16,400 |
| 17 | 14,000 | 10,000 | 7,300 | 5,800 | 14,300 | 13,400 | 13,600 | 26,000 | 39,400 | 28,800 | 20,700 | 10,400 |
| 18 | 14,000 | 9,600 | 7,300 | 5,600 | 12,900 | 12,500 | 13,800 | 27,900 | 43,600 | 28,300 | 18,900 | 9,000 |
| 19 | 13,800 | 9,800 | 7,300 | 5,600 | 12,900 | 11,300 | 14,000 | 28,000 | 48,300 | 28,100 | 20,500 | 8,900 |
| 20 | 13,600 | 9,900 | 7,300 | 5,600 | 11,800 | 10,500 | 14,700 | 28,100 | 50,400 | 25,600 | 20,300 | 8,600 |
| 21 | 14,600 | 9,700 | 7,400 | 5,600 | 10,600 | 10,100 | 14,800 | 27,800 | 51,700 | 24,000 | 19,300 | 8,200 |
| 22 | 13,200 | 9,600 | 7,500 | 5,600 | 11,500 | 13,400 | 16,500 | 27,500 | 55,100 | 24,600 | 22,600 | 8,600 |
| 23 | 15,900 | 9,600 | 7,500 | 5,600 | 10,000 | 13,200 | 24,000 | 27,000 | 57,900 | 24,100 | 25,600 | 7,700 |
| 24 | 15,900 | 9,400 | 7,500 | 5,800 | 9,900 | 14,000 | 27,100 | 26,000 | 59,700 | 24,100 | 33,800 | 7,200 |
| 25 | 15,500 | 9,300 | 7,200 | 5,800 | 11,700 | 14,300 | 27,100 | 25,000 | 59,700 | 24,100 | 33,400 | 7,000 |
| 26 | 14,200 | 9,100 | 7,100 | 6,100 | 16,900 | 16,000 | 26,200 | 25,500 | 61,700 | 24,100 | 28,200 | 7,000 |
| 27 | 13,800 | 8,800 | 6,900 | 6,300 | 17,400 | 17,000 | 26,000 | 29,900 | 58,700 | 21,600 | 22,600 | 7,700 |
| 28 | 18,800 | 8,900 | 6,300 | 6,400 | 17,000 | 17,200 | 27,000 | 32,800 | 50,700 | 19,800 | 25,000 | 7,500 |
| 29 | 15,500 | 9,000 | 6,100 | 6,400 | 16,000 | 17,000 | 28,100 | 33,700 | 55,400 | 19,300 | 20,200 | 7,500 |
| 30 | 16,300 | 8,800 | 6,000 | 6,300 | ....... | 16,800 | 35,000 | 32,800 | 55,000 | 19,800 | 20,500 | 7,200 |
| 31 | 17,800 | ....... | 5,800 | 6,100 | ....... | 16,100 | ....... | 31,300 | ....... | 18,900 | 18,900 | ...... |
| 1908–9. | | | | | | | | | | | | |
| 1 | 7,200 | 10,200 | 6,000 | 7,800 | 25,100 | 11,400 | 43,800 | 39,400 | 75,100 | 130,200 | 51,600 | 39,800 |
| 2 | 7,200 | 9,900 | 6,200 | 7,100 | 21,100 | 13,200 | 37,600 | 36,900 | 75,600 | 133,000 | 48,500 | 39,300 |
| 3 | 6,600 | 9,400 | 6,700 | 6,100 | 18,100 | 12,000 | 33,500 | 32,400 | 76,700 | 132,400 | 43,300 | 47,800 |
| 4 | 7,900 | 9,200 | 6,600 | 6,000 | 14,900 | 12,700 | 31,100 | 33,600 | 77,200 | 133,700 | 39,200 | 66,200 |
| 5 | 8,200 | 9,600 | 7,000 | 6,900 | 15,500 | 12,900 | 29,400 | 39,200 | 77,200 | 132,300 | 38,700 | 65,700 |
| 6 | 9,200 | 8,500 | 7,400 | 6,800 | 15,300 | 12,900 | 26,600 | 41,700 | 78,700 | 133,000 | 39,500 | 56,200 |
| 7 | 8,500 | 8,500 | 7,400 | 6,000 | 14,400 | 13,400 | 25,800 | 40,000 | 79,200 | 124,700 | 33,000 | 51,000 |
| 8 | 9,200 | 8,500 | 7,400 | 6,100 | 14,000 | 11,100 | 24,700 | 37,200 | 79,200 | 115,400 | 34,200 | 52,000 |
| 9 | 10,000 | 8,200 | 7,700 | 6,100 | 12,300 | 12,000 | 25,100 | 36,800 | 78,700 | 110,000 | 32,300 | 55,200 |
| 10 | 9,000 | 8,200 | 7,700 | 6,100 | 11,900 | 11,600 | 22,800 | 37,400 | 77,700 | 102,000 | 29,300 | 67,300 |
| 11 | 8,500 | 8,200 | 7,400 | 6,200 | 12,000 | 11,800 | 28,500 | 38,500 | 76,900 | 98,500 | 25,000 | 77,500 |
| 12 | 8,600 | 8,700 | 7,300 | 5,800 | 12,000 | 12,600 | 25,000 | 43,000 | 77,100 | 93,500 | 29,500 | 87,700 |
| 13 | 9,300 | 8,700 | 7,300 | 5,900 | 13,800 | 15,700 | 25,600 | 47,200 | 78,500 | 88,100 | 29,600 | 93,200 |
| 14 | 9,900 | 8,700 | 6,900 | 6,100 | 11,400 | 16,600 | 26,600 | 49,000 | 81,300 | 80,800 | 29,600 | 91,500 |
| 15 | 8,400 | 8,700 | 6,100 | 6,200 | 11,400 | 17,500 | 26,700 | 51,800 | 86,200 | 76,200 | 34,900 | 77,800 |
| 16 | 8,000 | 8,000 | 6,100 | 6,300 | 12,000 | 17,500 | 25,900 | 55,500 | 90,700 | 71,700 | 47,400 | 63,700 |
| 17 | 7,500 | 7,600 | 7,300 | 6,400 | 11,800 | 18,700 | 22,100 | 61,500 | 103,700 | 66,300 | 42,800 | 50,700 |
| 18 | 7,500 | 7,600 | 8,300 | 7,400 | 13,500 | 17,200 | 20,300 | 65,000 | 114,900 | 62,700 | 39,500 | 39,600 |
| 19 | 7,700 | 7,600 | 72,500 | 8,100 | 12,800 | 16,100 | 21,200 | 66,400 | 124,900 | 60,200 | 42,700 | 37,800 |
| 20 | 7,700 | 7,500 | 68,900 | 11,900 | 12,800 | 16,500 | 22,100 | 70,400 | 127,500 | 54,500 | 42,300 | 35,500 |
| 21 | 7,700 | 7,500 | 25,400 | 10,600 | 12,300 | 14,800 | 21,900 | 68,500 | 134,500 | 48,700 | 40,200 | 33,300 |
| 22 | 7,700 | 7,500 | 25,400 | 9,900 | 12,500 | 14,800 | 21,600 | 69,100 | 138,700 | 43,500 | 47,700 | 31,100 |
| 23 | 8,200 | 7,300 | 37,200 | 9,400 | 12,200 | 14,600 | 23,800 | 68,500 | 144,200 | 40,300 | 48,500 | 28,000 |
| 24 | 8,200 | 7,200 | 29,800 | 10,200 | 13,700 | 17,200 | 34,100 | 64,700 | 149,500 | 36,000 | 54,100 | 27,700 |
| 25 | 11,400 | 7,200 | 22,900 | 15,300 | 16,800 | 18,200 | 41,300 | 61,700 | 148,000 | 34,500 | 52,400 | 26,500 |
| 26 | 20,600 | 7,200 | 19,400 | 15,100 | 12,500 | 18,700 | 44,400 | 65,400 | 145,000 | 34,400 | 50,200 | 24,400 |
| 27 | 16,000 | 7,400 | 15,800 | 21,300 | 12,000 | 17,700 | 46,800 | 66,400 | 142,700 | 39,200 | 47,600 | 23,600 |
| 28 | 13,700 | 7,300 | 14,800 | 17,100 | 11,500 | 17,700 | 46,100 | 70,400 | 138,300 | 40,700 | 46,500 | 22,600 |
| 29 | 11,800 | 6,700 | 12,800 | 17,100 | ....... | 16,900 | 43,400 | 72,400 | 135,200 | 47,700 | 40,800 | 22,300 |
| 30 | 12,100 | 6,000 | 11,200 | 17,600 | ....... | 21,700 | 41,600 | 72,300 | 133,100 | 51,800 | 40,800 | 21,300 |
| 31 | 11,300 | ....... | 9,100 | 31,500 | ....... | 35,900 | ....... | 73,900 | ....... | 52,800 | 43,100 | ..... |

*Daily discharge, in second-feet, of Colorado River at Yuma, Ariz., for 1905–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 20,700 | 10,900 | 8,800 | 4,600 | 10,800 | 8,000 | 38,500 | 40,900 | 40,500 | 25,200 | 8,900 | [illegible] |
| 2 | 14,200 | 10,400 | 9,800 | 6,200 | 10,400 | 7,700 | 36,100 | 45,000 | 40,100 | 23,100 | 10,000 | [illegible] |
| 3 | 18,800 | 10,100 | 9,400 | 49,500 | 10,500 | 7,900 | 34,000 | 43,200 | 40,500 | 21,900 | 8,900 | [illegible] |
| 4 | 17,800 | 9,800 | 10,100 | 53,800 | 10,500 | 7,900 | 32,000 | 52,700 | 42,500 | 21,200 | 10,500 | [illegible] |
| 5 | 17,200 | 9,600 | 9,900 | 67,500 | 10,300 | 8,700 | 30,200 | 56,100 | 47,900 | 21,100 | 10,600 | [illegible] |
| 6 | 17,000 | 9,600 | 10,000 | 35,300 | 10,000 | 12,300 | 28,500 | 61,700 | 52,400 | 24,500 | 11,200 | [illegible] |
| 7 | [illegible] | 9,500 | 10,800 | 24,800 | 9,800 | 14,200 | 27,300 | 66,000 | 56,200 | 23,100 | [illegible] | [illegible] |
| 8 | 15,700 | 9,400 | 11,900 | 21,200 | 9,500 | 14,100 | 25,700 | 65,200 | 59,900 | 19,500 | 12,200 | [illegible] |
| 9 | 14,500 | 9,300 | 11,600 | 21,200 | 9,400 | 17,800 | 24,100 | 65,300 | 63,300 | 18,400 | 11,200 | [illegible] |
| 10 | 13,900 | 9,000 | 10,900 | 22,300 | 9,300 | 19,200 | 24,600 | 64,200 | 65,400 | 17,100 | 11,100 | [illegible] |
| 11 | 13,600 | 8,900 | 10,900 | 17,900 | 9,200 | 24,000 | 25,100 | 60,700 | 67,100 | 17,100 | 12,700 | [illegible] |
| 12 | 13,700 | 8,900 | 10,700 | 14,100 | 8,500 | 23,700 | 23,200 | 55,900 | 69,400 | 16,900 | 11,500 | [illegible] |
| 13 | 13,100 | 9,000 | 10,400 | 12,300 | 8,500 | 26,600 | 22,900 | 53,500 | 68,400 | 15,400 | 13,200 | [illegible] |
| 14 | 13,100 | 8,800 | 10,200 | 10,300 | 8,900 | 37,000 | 22,500 | 49,900 | 68,400 | 13,900 | 11,600 | [illegible] |
| 15 | 12,900 | 8,400 | 9,900 | 9,600 | 8,500 | 40,200 | 22,600 | 48,000 | 62,500 | 16,600 | 10,300 | [illegible] |
| 16 | 13,700 | 9,000 | 9,300 | 7,900 | 8,500 | 39,300 | 23,200 | 49,300 | 56,700 | 14,800 | 10,300 | [illegible] |
| 17 | 13,300 | 9,700 | 8,400 | 8,800 | 8,700 | 35,300 | 23,700 | 53,100 | 51,800 | 12,600 | 10,000 | [illegible] |
| 18 | 13,000 | 9,100 | 7,900 | 9,100 | 8,400 | 32,300 | 24,100 | 57,300 | 47,700 | 12,500 | 10,200 | [illegible] |
| 19 | 13,000 | 9,200 | 7,000 | 14,000 | 8,100 | 29,200 | 24,900 | 60,700 | 45,600 | 12,100 | 10,300 | [illegible] |
| 20 | 13,200 | 9,400 | 6,800 | 14,500 | 8,500 | 27,900 | 26,800 | 64,500 | 42,000 | 11,300 | 9,100 | [illegible] |
| 21 | 12,900 | 9,000 | 6,500 | 18,300 | 8,700 | 26,800 | 29,000 | 67,200 | 40,500 | 10,600 | 8,300 | [illegible] |
| 22 | 12,800 | 9,400 | 6,700 | 14,800 | 9,000 | 26,500 | 30,200 | 69,700 | 37,400 | 10,300 | 7,700 | [illegible] |
| 23 | 12,700 | 9,400 | 6,800 | 16,500 | 8,400 | 25,800 | 30,200 | 69,700 | 34,800 | 9,800 | 7,900 | [illegible] |
| 24 | 12,200 | 9,600 | 6,800 | 21,000 | 8,800 | 25,000 | 30,000 | 70,300 | 33,900 | 9,200 | 8,100 | [illegible] |
| 25 | 12,100 | 10,500 | 6,600 | 15,000 | 8,600 | 25,200 | 30,900 | 64,300 | 31,800 | 9,600 | 7,900 | [illegible] |
| 26 | 12,000 | 9,800 | 6,800 | 13,500 | 8,600 | 26,300 | 30,300 | 57,000 | 30,200 | 10,000 | 8,100 | [illegible] |
| 27 | 11,700 | 9,500 | 6,200 | 12,900 | 9,200 | 27,100 | 32,000 | 52,000 | 30,000 | 8,800 | 7,800 | [illegible] |
| 28 | 11,200 | 9,400 | 5,700 | 12,900 | 8,600 | 30,300 | 34,200 | 48,400 | 28,700 | 7,600 | 8,200 | [illegible] |
| 29 | 11,000 | 9,500 | 5,300 | 12,600 | ...... | 33,800 | 36,500 | 46,300 | 28,700 | 7,600 | 6,900 | [illegible] |
| 30 | 11,000 | 9,000 | 4,600 | 11,000 | ...... | 36,700 | 38,900 | 44,500 | 26,500 | 7,500 | 7,400 | [illegible] |
| 31 | 11,000 | ...... | 4,100 | 10,900 | ...... | 38,800 | ...... | 42,100 | ...... | 6,900 | 6,800 | ...... |
| 1910–11. | | | | | | | | | | | | |
| 1 | [illegible] | 8,700 | 8,200 | 6,500 | 9,900 | 8,100 | 17,000 | 27,000 | 50,300 | 69,000 | 46,500 | [illegible] |
| 2 | 6,300 | 8,700 | 8,000 | 4,800 | 9,700 | 7,800 | 18,800 | 27,400 | 50,900 | 67,000 | 41,500 | [illegible] |
| 3 | 6,400 | [illegible] | 7,300 | 5,400 | 11,300 | 7,300 | 18,900 | 27,100 | 51,300 | 65,500 | [illegible] | [illegible] |
| 4 | 6,800 | 7,800 | 7,200 | 5,200 | 12,400 | 7,000 | 18,200 | 27,800 | 53,000 | 61,900 | [illegible] | [illegible] |
| 5 | 7,200 | 8,800 | 7,300 | 4,700 | 16,200 | 7,200 | 17,200 | 29,100 | 52,900 | 55,200 | [illegible] | [illegible] |
| 6 | 6,800 | 7,900 | 7,500 | 4,000 | 12,300 | 6,900 | 20,600 | 32,500 | 53,800 | 48,800 | 26,300 | [illegible] |
| 7 | 6,600 | 7,900 | 7,800 | 4,700 | 24,300 | 6,600 | 17,800 | 34,700 | 54,900 | 46,500 | 23,500 | [illegible] |
| 8 | 6,700 | 8,000 | 7,310 | 5,500 | 22,200 | 6,100 | 21,500 | 33,500 | 55,200 | 50,700 | [illegible] | [illegible] |
| 9 | [illegible] | 7,600 | 7,250 | 4,800 | 16,500 | 18,200 | 20,000 | 32,300 | 55,500 | 53,400 | 18,600 | [illegible] |
| 10 | 5,400 | 7,200 | 6,300 | 3,700 | 15,900 | 19,800 | 22,000 | 32,400 | 56,900 | 54,600 | 18,200 | [illegible] |
| 11 | 5,000 | 7,200 | 7,100 | 4,300 | 25,700 | 12,300 | 22,000 | 30,400 | 59,500 | 53,500 | 18,800 | [illegible] |
| 12 | [illegible] | 7,700 | 6,600 | 3,800 | 22,100 | 12,200 | 23,600 | 34,000 | 60,700 | 50,800 | 17,900 | [illegible] |
| 13 | 4,200 | [illegible] | 7,000 | 7,100 | [illegible] | 26,400 | 25,200 | 37,000 | 63,200 | 49,700 | 17,800 | [illegible] |
| 14 | [illegible] | [illegible] | 7,100 | 5,800 | 16,100 | 34,500 | 25,900 | 40,000 | 64,900 | 46,900 | 16,000 | [illegible] |
| 15 | 5,600 | 8,400 | 7,200 | 16,300 | 13,700 | 25,500 | 25,000 | 44,000 | 67,900 | 44,700 | 13,800 | [illegible] |
| 16 | 5,600 | 9,500 | 7,100 | 10,900 | 13,000 | 21,500 | 23,300 | 50,500 | 67,900 | 39,000 | 12,800 | [illegible] |
| 17 | [illegible] | 8,700 | 6,800 | 7,000 | 12,800 | 22,800 | 21,900 | 53,600 | 67,800 | 38,500 | 12,000 | [illegible] |
| 18 | 5,400 | [illegible] | 7,200 | 6,100 | 10,700 | 25,700 | 20,900 | 55,800 | 69,200 | 39,500 | [illegible] | [illegible] |
| 19 | 5,000 | 7,800 | 7,000 | 13,700 | 9,700 | 30,500 | 19,500 | 61,000 | 68,500 | 37,800 | 12,800 | [illegible] |
| 20 | 4,900 | 7,700 | 6,500 | 18,700 | 9,800 | 29,200 | 19,600 | 64,200 | 69,600 | 41,500 | 13,500 | [illegible] |
| 21 | 5,800 | 7,700 | 6,400 | 15,100 | 10,500 | 27,500 | 19,000 | 61,300 | 70,200 | 41,200 | 12,300 | [illegible] |
| 22 | 5,800 | [illegible] | 6,300 | 14,500 | 10,700 | 24,500 | 18,000 | 57,100 | 70,600 | 42,600 | 11,400 | [illegible] |
| 23 | [illegible] | 7,200 | 6,700 | 13,300 | 10,600 | 20,400 | 16,100 | 53,700 | 74,100 | 44,000 | 10,900 | [illegible] |
| 24 | [illegible] | 7,200 | 7,100 | 10,900 | 9,800 | 17,700 | 15,600 | 53,800 | 78,300 | 41,200 | 11,400 | [illegible] |
| 25 | 10,600 | 8,100 | 6,900 | 10,000 | 7,900 | 16,700 | 17,800 | 54,800 | 76,800 | 49,800 | 11,200 | [illegible] |
| 26 | 11,500 | 8,900 | 7,000 | 11,100 | 7,000 | 15,500 | 18,800 | 57,600 | 75,300 | 53,700 | 11,000 | [illegible] |
| 27 | [illegible] | 8,200 | 7,100 | 10,500 | 7,600 | 15,200 | 19,400 | 58,800 | 73,900 | 56,000 | 10,000 | [illegible] |
| 28 | 10,200 | [illegible] | 6,900 | 9,800 | 7,700 | 15,000 | 20,800 | 59,100 | 71,900 | 53,900 | 10,700 | [illegible] |
| 29 | 10,300 | [illegible] | 5,600 | 10,700 | ...... | 16,500 | 22,700 | 57,800 | 70,500 | 51,200 | 11,400 | [illegible] |
| 30 | 9,700 | 7,800 | 5,800 | 13,200 | ...... | 17,000 | 24,800 | 53,700 | 69,800 | 56,100 | 14,400 | 8,700 |
| 31 | 9,000 | ...... | 5,600 | 10,300 | ...... | 16,700 | ...... | 52,000 | ...... | 50,400 | 16,500 | ...... |

*Daily discharge, in second-feet, of Colorado River at Yuma, Ariz., for 1905–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 8,500 | 13,000 | 9,800 | 6,500 | 7,700 | 7,800 | 17,000 | 15,400 | 80,200 |
| 2 | 7,800 | 13,200 | 10,100 | 5,800 | 7,500 | 7,700 | 15,700 | 16,500 | 83,300 |
| 3 | 15,500 | 16,200 | 9,700 | 5,200 | 7,300 | 7,000 | 14,800 | 21,000 | 87,700 |
| 4 | 25,200 | 19,200 | 9,800 | 5,100 | 6,500 | 7,300 | 14,300 | 21,200 | 91,500 |
| 5 | 24,500 | 18,600 | 9,500 | 5,000 | 6,500 | 7,000 | 14,700 | 20,200 | 102,300 |
| 6 | 36,000 | 15,800 | 9,300 | 4,400 | 7,000 | 7,000 | 15,000 | 20,500 | 112,800 |
| 7 | 37,600 | 14,600 | 8,300 | 4,300 | 7,300 | 7,000 | 13,700 | 24,000 | 117,500 |
| 8 | 36,500 | 14,000 | 8,100 | 4,600 | 7,300 | 7,000 | 14,800 | 31,700 | 120,700 |
| 9 | 36,700 | 13,300 | 8,900 | 4,300 | 7,300 | 7,100 | 15,800 | 36,500 | 122,600 |
| 10 | 41,300 | 13,300 | 6,700 | 4,000 | 7,300 | 7,000 | 17,000 | 37,800 | 120,800 |
| 11 | 46,800 | 12,700 | 5,900 | 3,600 | 7,200 | 7,000 | 18,600 | 35,300 | 117,100 |
| 12 | 50,500 | 12,200 | 5,500 | 3,400 | 7,100 | 12,800 | 20,200 | 34,000 | 119,700 |
| 13 | 55,200 | 11,700 | 5,600 | 3,400 | 7,000 | 12,200 | 22,800 | 31,500 | 120,600 |
| 14 | 60,200 | 11,700 | 5,600 | 3,600 | 7,100 | 15,500 | 26,300 | 33,000 | 118,600 |
| 15 | 58,900 | 11,100 | 6,500 | 5,200 | 7,200 | 17,500 | 29,400 | 36,500 | 115,500 |
| 16 | 43,500 | 11,100 | 6,700 | 3,700 | 8,800 | 21,700 | 32,400 | 39,800 | 117,200 |
| 17 | 33,800 | 11,000 | 7,100 | 3,600 | 7,000 | 14,500 | 34,700 | 41,000 | 122,700 |
| 18 | 29,100 | 10,400 | 8,100 | 4,000 | 7,300 | 15,300 | 34,700 | 41,100 | 130,700 |
| 19 | 26,800 | 11,000 | 8,000 | 4,600 | 7,500 | 16,500 | 32,500 | 45,200 | 135,800 |
| 20 | 23,800 | 11,000 | 7,300 | 5,300 | 7,200 | 15,200 | 28,200 | 47,200 | 140,800 |
| 21 | 21,800 | 10,700 | 7,700 | 5,500 | 7,600 | 14,100 | 25,000 | 47,700 | 142,700 |
| 22 | 19,600 | 10,400 | 8,100 | 5,500 | 8,000 | 13,200 | 24,000 | 45,800 | 144,000 |
| 23 | 18,000 | 9,800 | 7,600 | 6,300 | 7,800 | 17,000 | 21,900 | 46,000 | 137,500 |
| 24 | 18,700 | 10,400 | 7,500 | 6,400 | 7,600 | 14,600 | 21,000 | 50,000 | 108,500 |
| 25 | 17,200 | 9,300 | 6,600 | 7,500 | 7,000 | 14,300 | 19,900 | 53,800 | 88,500 |
| 26 | 15,600 | 9,800 | 6,800 | 8,200 | 7,300 | 14,100 | 19,900 | 57,800 | 78,000 |
| 27 | 14,600 | 9,700 | 7,600 | 8,000 | 7,700 | 18,200 | 18,700 | 60,400 | 70,000 |
| 28 | 15,500 | 9,600 | 6,900 | 7,500 | 7,700 | 24,800 | 17,500 | 62,600 | 62,500 |
| 29 | 17,300 | 9,600 | 6,500 | 7,400 | 7,800 | 23,500 | 16,000 | 65,600 | 58,400 |
| 30 | 15,200 | 9,800 | 6,900 | 7,600 | ........ | 20,200 | 15,500 | 69,100 | 57,100 |
| 31 | 14,000 | ........ | 5,800 | 7,500 | ........ | 18,300 | ........ | 76,500 | ........ |

NOTE.—Daily discharge determined by the indirect method for shifting channels.

*Monthly discharge of Colorado River at Yuma, Ariz., for 1902–1912.*

[Drainage area, 225,000 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| 1902. | | | | | | |
| January | 4,520 | 3,230 | 3,727 | 0.017 | 0.02 | 229,000 |
| February | 4,720 | 3,300 | 3,955 | .018 | .02 | 220,000 |
| March | 5,340 | 4,340 | 4,903 | .022 | .02 | 301,000 |
| April | 11,400 | 4,340 | 6,179 | .027 | .03 | 368,000 |
| May | 59,200 | 11,400 | 35,961 | .160 | .18 | 2,211,000 |
| June | 56,200 | 29,000 | 42,520 | .189 | .21 | 2,530,000 |
| July | 27,000 | 5,130 | 12,527 | .056 | .06 | 770,000 |
| August | 5,560 | 3,230 | 4,183 | .019 | .02 | 257,000 |
| September | 8,360 | 3,050 | 3,819 | .017 | .02 | 227,000 |
| The period | ........ | ........ | ........ | ........ | ........ | 7,110,000 |
| 1902–3. | | | | | | |
| October | 6,600 | 3,140 | 4,299 | .019 | .02 | 264,000 |
| November | 5,540 | 3,140 | 4,187 | .019 | .02 | 249,000 |
| December | 12,600 | 3,590 | 5,412 | .024 | .03 | 333,000 |
| January | 3,900 | 2,694 | 3,089 | .014 | .02 | 190,000 |
| February | 4,100 | 2,800 | 3,372 | .015 | .02 | 187,000 |
| March | 9,525 | 3,375 | 6,117 | .027 | .03 | 376,000 |
| April | 31,600 | 9,200 | 14,326 | .064 | .07 | 852,600 |
| May | 56,400 | 13,050 | 33,735 | .150 | .17 | 2,074,000 |
| June | 72,219 | 28,300 | 53,148 | .236 | .26 | 3,163,000 |
| July | 69,500 | 20,350 | 37,479 | .166 | .19 | 2,304,000 |
| August | 19,900 | 6,200 | 10,869 | .048 | .06 | 668,000 |
| September | 9,200 | 5,000 | 6,786 | .030 | .03 | 404,000 |
| The year | 72,000 | 2,694 | 15,200 | .068 | .92 | 11,100,000 |

*Monthly discharge of Colorado River at Yuma, Ariz., for 1902–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1903–4.** | | | | | | |
| October | 15,806 | 6,128 | 8,482 | 0.038 | 0.04 | 522,000 |
| November | 6,386 | 4,675 | 5,399 | .024 | .03 | 321,000 |
| December | 5,345 | 3,170 | 4,343 | .019 | .02 | 267,000 |
| January | 4,007 | 3,350 | 3,635 | .016 | .02 | 224,000 |
| February | 4,310 | 3,342 | 3,797 | .017 | .02 | 218,000 |
| March | 9,320 | 4,446 | 5,978 | .027 | .03 | 368,000 |
| April | 19,400 | 5,600 | 8,058 | .036 | .04 | 479,000 |
| May | 45,900 | 17,040 | 27,697 | .123 | .14 | 1,703,000 |
| June | 51,170 | 32,846 | 43,814 | .195 | .22 | 2,607,000 |
| July | 38,930 | 14,580 | 23,047 | .102 | .12 | 1,417,000 |
| August | 24,000 | 12,950 | 17,144 | .076 | .09 | 1,054,000 |
| September | 18,500 | 5,538 | 11,621 | .052 | .06 | 691,000 |
| The year | 51,170 | 3,170 | 13,600 | .060 | .83 | 9,870,000 |
| **1904–5.** | | | | | | |
| October | 23,200 | 5,660 | 11,642 | .052 | .06 | 716,000 |
| November | 7,964 | 4,754 | 6,151 | .027 | .03 | 366,000 |
| December | 5,079 | 3,480 | 4,477 | .020 | .02 | 275,000 |
| January | 27,500 | 3,750 | 8,130 | .036 | .04 | 500,000 |
| February | 82,820 | 5,800 | 28,100 | .125 | .13 | 1,561,000 |
| March | 110,800 | 23,500 | 50,540 | .225 | .26 | 3,108,000 |
| April | 97,500 | 19,450 | 37,830 | .168 | .19 | 2,251,000 |
| May | 59,020 | 33,910 | 42,170 | .187 | .22 | 2,593,000 |
| June | 94,320 | 61,500 | 76,470 | .340 | .38 | 4,550,000 |
| July | 57,800 | 16,750 | 30,310 | .135 | .16 | 1,864,000 |
| August | 17,450 | 6,850 | 12,100 | .054 | .06 | 744,000 |
| September | 9,667 | 5,060 | 6,495 | .029 | .03 | 386,000 |
| The year | 110,800 | 3,480 | 26,200 | .116 | 1.58 | 18,900,000 |
| **1905–6.** | | | | | | |
| October | 15,500 | 5,220 | 8,037 | .036 | .04 | 494,000 |
| November | 102,700 | 5,620 | 12,000 | .053 | .06 | 714,000 |
| December | 77,360 | 5,900 | 15,400 | .068 | .08 | 947,000 |
| January | 16,100 | 4,260 | 6,870 | .030 | .03 | 422,000 |
| February | 14,800 | 6,360 | 9,560 | .042 | .04 | 531,000 |
| March | 75,000 | 6,740 | 25,400 | .113 | .13 | 1,560,000 |
| April | 44,100 | 25,500 | 32,500 | .144 | .16 | 1,930,000 |
| May | 79,800 | 35,100 | 54,100 | .240 | .28 | 3,330,000 |
| June | 99,200 | 65,000 | 84,200 | .374 | .42 | 5,010,000 |
| July | 74,200 | 27,000 | 39,000 | .173 | .20 | 2,400,000 |
| August | 25,600 | 13,400 | 19,200 | .085 | .10 | 1,180,000 |
| September | 14,500 | 9,600 | 11,700 | .052 | .06 | 696,000 |
| The year | 102,000 | 4,260 | 26,500 | .118 | 1.60 | 19,200,000 |
| **1906–7.** | | | | | | |
| October | 15,900 | 8,600 | 11,700 | .052 | .06 | 719,000 |
| November | 12,500 | 8,430 | 9,710 | .043 | .05 | 578,000 |
| December | 60,000 | 6,800 | 18,300 | .081 | .09 | 1,130,000 |
| January | 44,300 | 12,700 | 21,500 | .096 | .11 | 1,320,000 |
| February | 31,300 | 12,400 | 18,800 | .084 | .09 | 1,040,000 |
| March | 68,700 | 14,800 | 24,100 | .107 | .12 | 1,480,000 |
| April | 50,500 | 24,700 | 35,300 | .157 | .18 | 2,100,000 |
| May | 68,800 | 28,600 | 37,900 | .168 | .19 | 2,330,000 |
| June | 115,000 | 72,200 | 94,800 | .421 | .47 | 5,640,000 |
| July | 114,000 | 52,400 | 96,400 | .428 | .49 | 5,930,000 |
| August | 61,900 | 23,100 | 37,600 | .167 | .19 | 2,310,000 |
| September | 43,300 | 13,100 | 23,200 | .103 | .12 | 1,380,000 |
| The year | 115,000 | 6,800 | 35,800 | .159 | 2.16 | 26,000,000 |
| **1907–8.** | | | | | | |
| October | 18,800 | 10,100 | 13,600 | .060 | .07 | 836,000 |
| November | 16,300 | 8,800 | 10,800 | .048 | .05 | 643,000 |
| December | 8,800 | 5,800 | 7,450 | .033 | .04 | 458,000 |
| January | 7,400 | 5,600 | 6,320 | .028 | .03 | 389,000 |
| February | 45,000 | 6,300 | 14,200 | .063 | .07 | 817,000 |
| March | 33,000 | 10,100 | 16,100 | .072 | .08 | 990,000 |
| April | 35,000 | 12,900 | 17,800 | .079 | .09 | 1,060,000 |
| May | 33,700 | 28,000 | 27,200 | .121 | .14 | 1,670,000 |
| June | 61,700 | 30,000 | 42,900 | .191 | .21 | 2,550,000 |
| July | 53,800 | 18,900 | 32,600 | .145 | .17 | 2,000,000 |
| August | 36,100 | 18,600 | 24,300 | .108 | .12 | 1,490,000 |
| September | 19,800 | 7,000 | 11,400 | .051 | .06 | 678,000 |
| The year | 61,700 | 5,600 | 18,700 | .083 | 1.13 | 13,600,000 |

*Monthly discharge of Colorado River at Yuma, Ariz., for 1902–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1908–9.** | | | | | | |
| October | 20,600 | 6,600 | 9,510 | 0.042 | 0.05 | 585,000 |
| November | 10,200 | 6,000 | 8,090 | .036 | .04 | 481,000 |
| December | 72,500 | 6,000 | 15,900 | .071 | .08 | 978,000 |
| January | 31,500 | 5,800 | 10,000 | .044 | .05 | 615,000 |
| February | 25,100 | 11,400 | 13,900 | .062 | .06 | 772,000 |
| March | 35,900 | 11,100 | 15,900 | .071 | .08 | 978,000 |
| April | 46,800 | 20,300 | 30,300 | .135 | .15 | 1,800,000 |
| May | 73,900 | 32,400 | 54,100 | .240 | .28 | 3,330,000 |
| June | 149,500 | 75,100 | 105,000 | .467 | .52 | 6,250,000 |
| July | 133,700 | 34,400 | 79,600 | .354 | .41 | 4,890,000 |
| August | 54,100 | 25,000 | 40,800 | .181 | .21 | 2,510,000 |
| September | 93,200 | 21,300 | 48,500 | .216 | .24 | 2,890,000 |
| The year | 149,500 | 5,800 | 36,000 | .160 | 2.17 | 26,100,000 |
| **1909–10.** | | | | | | |
| October | 20,700 | 11,000 | 14,000 | .062 | .07 | 861,000 |
| November | 10,900 | 8,300 | 9,440 | .042 | .05 | 562,000 |
| December | 11,900 | 4,100 | 8,410 | .037 | .04 | 517,000 |
| January | 67,500 | 4,600 | 18,800 | .084 | .10 | 1,160,000 |
| February | 10,800 | 8,100 | 9,160 | .041 | .04 | 509,000 |
| March | 40,200 | 7,700 | 24,400 | .108 | .12 | 1,500,000 |
| April | 38,900 | 22,500 | 28,700 | .128 | .14 | 1,710,000 |
| May | 70,300 | 40,900 | 56,500 | .251 | .29 | 3,470,000 |
| June | 69,400 | 26,500 | 47,000 | .209 | .23 | 2,800,000 |
| July | 25,200 | 6,900 | 14,700 | .065 | .08 | 904,000 |
| August | 13,200 | 6,300 | 9,620 | .043 | .05 | 592,000 |
| September | 11,300 | 4,600 | 6,170 | .028 | .03 | 367,000 |
| The year | 70,300 | 4,100 | 20,600 | .092 | 1.24 | 15,000,000 |
| **1910–11.** | | | | | | |
| October | 13,500 | 4,300 | 6,980 | .031 | .04 | 429,000 |
| November | 9,500 | 6,300 | 7,850 | .035 | .04 | 467,000 |
| December | 8,200 | 5,600 | 6,940 | .031 | .04 | 427,000 |
| January | 18,700 | 3,700 | 8,800 | .039 | .04 | 541,000 |
| February | 25,700 | 7,000 | 13,400 | .059 | .06 | 743,000 |
| March | 34,500 | 6,100 | 17,400 | .077 | .09 | 1,070,000 |
| April | 25,900 | 15,600 | 20,400 | .091 | .10 | 1,210,000 |
| May | 64,200 | 27,000 | 45,000 | .200 | .23 | 2,760,000 |
| June | 78,300 | 50,300 | 64,200 | .285 | .32 | 3,820,000 |
| July | 69,000 | 37,800 | 50,100 | .223 | .26 | 3,080,000 |
| August | 46,500 | 10,000 | 18,400 | .082 | .10 | 1,130,000 |
| September | 13,300 | 6,300 | 8,900 | .040 | .04 | 530,000 |
| The year | 78,300 | 3,700 | 22,400 | .099 | 1.36 | 16,200,000 |
| **1911–12.** | | | | | | |
| October | 60,200 | 7,800 | 28,600 | .125 | .14 | 1,760,000 |
| November | 19,200 | 9,300 | 12,140 | .054 | .06 | 722,000 |
| December | 10,100 | 5,500 | 7,600 | .034 | .04 | 465,000 |
| January | 8,200 | 3,400 | 5,390 | .024 | .03 | 331,000 |
| February | 8,800 | 6,500 | 7,370 | .033 | .04 | 424,000 |
| March | 24,800 | 7,000 | 13,300 | .059 | .07 | 818,000 |
| April | 34,700 | 13,700 | 21,100 | .094 | .10 | 1,260,000 |
| May | 76,500 | 15,400 | 40,800 | .181 | .21 | 2,510,000 |
| June | 144,000 | 57,100 | 108,000 | .480 | .54 | 6,430,000 |
| The period | | | | | | 14,700,000 |

NOTE.—Daily discharge determined by the indirect method for shifting channels. Monthly values computed by engineers of the United States Geological Survey.

## COLORADO RIVER BELOW YUMA, ARIZ.

During the period 1903–1906 the United States Geological Survey made frequent measurements and installed gages at a number of points on the lower Colorado River and Imperial Valley canals. It was during this period that the flood, described on page 32, occurred. The following descriptions and data apply to the work done at that time.

### COLORADO RIVER BELOW HEADING No. 3 OF THE IMPERIAL CANAL.

Measurements at this point were begun July 12, 1905, as so much water was at that date going down the canal that it was simpler and more economical to measure the water in the old channel of the Colorado than to continue the measurements on the canal itself.

In the center of the river, opposite heading No. 3, was an island nearly a mile long. The channel on the west side of the island was about 600 feet wide; that on the east side was about 800 feet wide. At first the discharge was measured at a point below the island, but by August 15 a sand bar had formed from the island to the west bank of the river below the heading, and all water passing down on the west of the island entered the canal. August 31 a gage was established above the head of the island, and after that date all discharge measurements were made at the head of the island. Measurements were not made at one certain point, but at any favorable cross section among the shifting bars of mud and quicksand that could be reached and measured by boat or by wading.

The old channel continued to silt up gradually and the new one to scour deeper, and October 20, 1905, all the water was carried by the new channel—the Imperial canal. The California Development Co. made a serious and expensive effort to turn the water back by constructing a dam of piles, brush mats, brush, and sand bags. By the latter part of November this dam had progressed sufficiently to raise the height of the water 2.5 feet, and about 300 second-feet of water flowed down the old channel. Most of the great flood of November 29 at its crest went down the old channel; but by the time it had receded the dam was washed away, the old channel was silted up higher than before, and the new channel was scoured still deeper.

The gage was a vertical rod nailed to the root of a large willow stump on the east bank of the river. It was located at a point nearly opposite the upper end of the upper row of piling, extending from the head of the island obliquely upstream to the west bank, and was opposite station 425 of the Yuma Valley levee line.

*Discharge measurements of Colorado River, below heading No. 3 of Imperial canal, in 1905–6.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1905. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| July 12 | W. D. Smith | | 11,610 | Nov. 30 | J. A. Tolin | | [b] 70,000 |
| 30 | L. B. Brainard | | 2,484 | Dec. 7 | W. D. Smith | | 878 |
| Aug. 3 | F. R. S. Buttemer | | 1,999 | 13 | do | | [c] 0 |
| 10 | do | | 2,218 | 17 | do | | [c] 0 |
| 18 | W. D. Smith | | 1,169 | 23 | do | | [a] 0 |
| 24 | do | | 769 | | | | |
| 31 | do | 2.90 | 557 | 1906. | | | |
| Sept. 7 | do | 1.80 | 90 | Apr. 10 | W. D. Smith | 4.90 | 1,760 |
| 14 | do | 3.80 | 1,232 | 24 | do | 4.60 | 974 |
| 22 | do | 2.10 | 175 | May 4 | do | 5.60 | 2,040 |
| 28 | do | 1.60 | 37 | 14 | do | 5.10 | 1,040 |
| Oct. 11 | do | 3.50 | 1,014 | 22 | do | 6.70 | 3,840 |
| 18 | do | 1.50 | 25 | 29 | do | 6.80 | 3,440 |
| 25 | do | 1.00 | [a] 0 | June 7 | do | 7.00 | 3,210 |
| 30 | do | .95 | [a] 0 | 19 | do | 6.30 | 398 |
| Nov. 4 | do | .95 | [a] 0 | 27 | Smith and Buttemer | 7.10 | [d] 1,220 |
| 11 | do | | [a] 0 | July 4 | F. R. S. Buttemer | 4.50 | 34 |
| 18 | do | 2.10 | 87 | 11 | do | 3.80 | 0 |
| 25 | do | 2.45 | 206 | | | | |

[a] No discharge Oct. 20 to Nov. 11, 1905.
[b] Estimated.
[c] No discharge Dec. 13–31, 1905.
[d] Second channel estimated.

## IMPERIAL CANAL AT HEADINGS IN UNITED STATES AND MEXICO.

*General statement.*—The original heading of the Imperial canal, designated in the following tables as heading No. 1, is located about 10 miles by Colorado River below Yuma, Ariz., on the California side, immediately above the international boundary line and opposite Pilot Knob Mountain. During the summer of 1904 a second heading was made immediately below the boundary line, and in October of the same year an opening was made to the river at a point 4 miles below the boundary. This last opening is designated as heading No. 3. No gage was placed at either heading No. 2 or No. 3. The canal runs parallel to the river for the first 4 miles of its course, so that it was necessary to cut a channel only half a mile long.

The first 12 miles of the canal was constructed; the remaining 40 miles is an old natural channel, called Alamo River. The whole length of the canal lies in the Colorado River delta, which is composed of loose, sandy soil, covered with a heavy growth of mesquite, willow, and arrowwood. The canal as a whole had a greater fall per mile than the river, but for the first 15 miles the fall was less than that in the river, and for this reason the canal had to be dredged constantly to keep it open. The exceptional floods of January, February, March, and April, 1905, scoured it out to a channel of considerable depth, and during the regular annual flood of May and June, which was unusually high and long, this scouring was continued to such an extent that when the flood began to recede and the river again began to deposit mud, the velocity in the canal was much greater than in the river below heading No. 3. The result was that the old river channel silted up heavily while the new channel, the

canal from heading No. 3 down, was still scouring. As the old river channel filled with silt a greater proportion of the water went down the canal, increasing the velocity; and as the canal scoured deeper the amount and velocity of the water going down the old channel were decreased. These reactions were so great that the process of scouring a new channel, which had been going on slowly for several months, began to make rapid progress. The canal was widened in a few days from 100 to 300 or 400 feet. June 30 the total discharge of the river was 61,500 second-feet, 22 per cent of which went down the canal; July 8 the total discharge was 37,200 second-feet, 67 per cent of which went down the canal.

Meter measurements were made weekly during 1905 to determine the total amount of water diverted by the canal, the amount diverted in the United States, the amount diverted in Mexico, and the amount going down the old river channel.

Besides miscellaneous gagings farther down the canal, measurements were made at five points, as follows: Heading No. 1, heading No. 2, heading No. 3 above its junction with the original canal (giving discharge of heading No. 3 alone), heading No. 3 below the junction (giving the total discharge of the canal), and the old channel of the Colorado below heading No. 3. At all of these stations except the last the conditions were constantly changing. The banks were washing away or being filled in, and the bed was silting up or scouring out and being dredged out. For these reasons it was necessary to put in new gages often. The frequent passage of barges and dredges rendered the maintenance of permanent cables impracticable, and a light cable was stretched for each gaging. Measurements each week have been made at such points as would give the desired results, directly or indirectly, with the least expenditure of time and money.

The total discharge of the canal during 1905 was obtained as follows: From January 1 to March 10 by direct meter measurements at heading No. 3 below the junction; from March 11 to June 30 by adding discharges of headings Nos. 1, 2, and 3; from July 1 to December 31 by subtracting the discharge of the old channel below heading No. 3 from the discharge of Colorado River at Yuma. To obtain the discharge of the old channel below heading No. 3 on the dates when it was not measured directly, the total discharge of the canal was subtracted from the discharge of the Colorado at Yuma.

The mean discharge of heading No. 1 for each month was obtained by averaging results of meter measurements. The mean discharge of the whole canal for each month was obtained in the same way. Measurements for the first ten months are so well distributed that they are given equal weight. On account of the flood of November 29, the estimate for November and December is based on an interpolation of the percentage of the total flow of the river diverted by

the canal. As the flood in the old channel lasted only five days, any error from this method of calculation is not great.

The monthly summary of the discharge of headings Nos. 2 and 3, showing total diversion made in Mexico, is obtained by subtracting the discharge of heading No. 1 from the total. The monthly summary of the discharge of the old channel below heading No. 3 is obtained by subtracting the total discharge of the canal from the discharge of Colorado River at Yuma.

No gage observer was obtainable for the three lower stations, but gage-height records were kept at headings Nos. 1 and 2.

June 15, 1904, a waste gate was put in operation at a point 12 miles below heading No. 1, called the Quail River waste gate. Water going through this gate passes through Quail River into Padrones River and thence into Volcano Lake. Volcano Lake has two outlets—New River, which discharges into Salton Basin, and Hardy River, which discharges into the Gulf of California through the old channel of the Colorado. March 20, 1905, the flood silted up the channel leading from the waste gate and no more water was diverted from the canal at this point.

After the flood of November 29, 1905, a channel was dredged from the canal to Quail River from a point 15 miles below heading No. 1, and a considerable amount of water diverted to Padrones River and Volcano Lake. All the water going down the canal past this point discharges through Alamo and New rivers into Salton Basin, except what is lost by seepage and used for irrigation in the Imperial Valley.

*Heading No. 1.*—This station was established October 24, 1903. It was located half a mile from the river, 600 feet below the wooden head gates, and was 10 miles by river below Yuma, Ariz., on the California side.

The channel is straight for 600 feet above and 300 feet below the cable and has a width of 70 feet. The right bank is low and is liable to overflow; the left bank has an elevation of 6 feet above high water. The bed of the canal is composed of silt and sand, is free from vegetation, and is very unstable. There is but one channel at all stages, but when the gage at Yuma reads about 26 feet the river overflows into the channel below the gaging section. The current has a moderate velocity.

Discharge measurements were made by means of a boat and cable.

A vertical gage was located just above the international boundary line, on the right bank.

The canal at this heading is filled with mud and has been temporarily abandoned, but some flood water passed through it during 1905 and was carefully measured.

*Heading No. 2.*—This heading diverts water from Colorado River at a point in Mexico 50 feet below the international boundary line,

400 feet below heading No. 1, and 10 miles by river from Yuma, Ariz. The station was established January 12, 1905, and weekly discharge measurements were made until August 31, 1905.

The channel is straight for 200 feet above and 600 feet below the cable and is about 80 feet wide. The bed and banks are composed of clay and silt and are unstable. There is but one channel at all stages, but when the gage in Yuma reads about 28 feet the river overflows into the canal below the gaging section. As the canal from heading No. 1 joins this canal about 800 feet below the gage rod, the two gages read about the same.

Discharge measurements were made by means of a boat and cable.

A vertical rod gage was driven into the north bank of the canal at a point 50 feet from the river.

*Heading No. 3 (above the junction).*—This heading or intake was in Mexico, 4 miles below the California-Mexico boundary line and 14 miles by Colorado River below Yuma, Ariz. The station was established March 8, 1905. The point of gaging was about one-half mile from the river and 150 feet above the junction of heading No. 3 with the original canal. Gagings at this point give the discharge of heading No. 3 alone.

The channel is straight for 500 feet above the point of gaging and nearly straight for 500 feet below. In the highest floods the banks are overflowed both above and below the station. The cross section is regular, the bed is unstable, and the current is swift. During July, 1905, the flood widened the channel from 100 to 300 feet and lowered the bed about 10 feet.

Discharge measurements were made by means of a boat and cable.

The gage was the same as for heading No. 3 below the junction, described below. The gage height is an indication of the total discharge of the canal and not of this heading alone.

*Heading No. 3 (below the junction).*—This station was established October 7, 1904. The point of gaging was about half a mile from the river and 300 feet below the junction of heading No. 3 with the original canal. Gagings at this point give the total discharge of the canal.

The channel is straight for 300 feet above and 500 feet below the cable. The banks are subject to overflow. The cross section is regular. The bed of the canal is composed of silt and sand and is very unstable. During July, 1905, the canal, which at this point was about 100 feet wide, was scoured out to a width of 400 feet and the depth increased about 8 feet.

Discharge measurements were made by means of a boat and cable.

The gage was a vertical rod on the south bank.

*Discharge measurements of Imperial canal at California-Mexico boundary line, head of canal, in 1903-1904.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1904. | | *Feet.* | *Sec.-ft.* |
| Jan. 8 | W. D. Smith | 7.6 | 301 | Apr. 6 | W. D. Smith | 9.80 | 704 |
| 28 | do | 8.4 | 429 | 20 | do | 10.00 | 725 |
| Feb. 25 | do | 8.1 | 456 | May 8 | do | 12.75 | 1,377 |
| Mar. 12 | W. W. Follett | 9.0 | 643 | 24 | do | 12.20 | 1,331 |
| Apr. 17 | W. D. Smith | 10.1 | 761 | June 4 | do | 10.80 | 1,011 |
| May 5 | do | 11.9 | 904 | 10 | do | 14.10 | 2,097 |
| 19 | do | 10.0 | 703 | 16 | do | 13.95 | 1,776 |
| June 5 | do | 9.0 | 553 | Aug. 3 | do | 13.40 | 1,646 |
| 23 | do | 10.7 | 605 | 9 | S. M. Smith | 13.60 | 1,626 |
| July 8 | do | 9.7 | 449 | 17 | W. D. Smith | 13.35 | 1,752 |
| 21 | do | 10.7 | 792 | 27 | do | 13.30 | 1,679 |
| Aug. 10 | L. M. Barnes | 8.8 | 436 | Sept. 3 | S. M. Smith | 13.30 | 1,691 |
| Sept. 11 | W. D. Smith | 8.9 | 490 | 10 | do | 12.50 | 1,642 |
| 24 | do | 10.0 | 770 | 17 | do | 12.00 | 1,271 |
| Oct. 9 | do | 10.6 | 820 | 24 | W. D. Smith | 11.10 | 868 |
| 24 | do | 9.5 | 644 | Oct. 1 | do | 10.90 | 762 |
| Nov. 6 | do | 9.2 | 624 | 7 | do | 10.60 | 1,213 |
| 20 | do | 8.9 | 456 | 15 | do | 12.75 | 1,976 |
| Dec. 7 | do | 8.7 | 528 | 21 | do | 10.60 | 1,356 |
| 21 | do | 8.45 | 429 | 28 | do | 9.35 | 1,016 |
| | | | | Nov. 4 | do | 9.30 | 898 |
| 1904. | | | | 11 | do | 9.20 | 937 |
| Jan. 1 | W. D. Smith | 8.60 | 455 | 18 | do | 8.95 | 954 |
| 15 | do | 8.30 | 410 | 25 | do | 8.85 | 886 |
| 27 | do | 8.30 | 408 | Dec. 2 | do | 8.60 | 826 |
| Feb. 12 | do | 8.30 | 438 | 9 | do | 8.85 | 879 |
| 26 | do | 8.82 | 551 | 20 | do | 8.90 | 899 |
| Mar. 16 | do | 10.16 | 780 | 28 | do | 8.00 | 607 |
| 16 | do | 10.14 | 751 | | | | |

*Discharge measurements made at the Imperial canal headings during 1905.*

| Date. | Heading No. 1. | Heading No. 2. | Heading No. 3. | | Total discharge of canal. |
|---|---|---|---|---|---|
| | | | Above junction. | Below junction. | |
| | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Jan. 12 | | 380 | | 900 | 900 |
| Jan. 26 | 90 | 350 | | 990 | 990 |
| Feb. 8 | | | | 6,690 | 6,690 |
| 14 | 460 | 900 | | 2,480 | 2,480 |
| 28 | | | | 3,100 | 3,100 |
| Mar. 8 | 1,110 | 1,530 | 1,180 | 3,600 | 3,600 |
| 18 | 1,270 | 2,200 | 1,530 | | 5,000 |
| 21 | 2,590 | 2,240 | 1,920 | | 6,750 |
| 28 | 530 | 1,180 | 1,750 | | 3,460 |
| Apr. 6 | 450 | 1,190 | 1,650 | | 3,290 |
| 20 | 760 | 1,190 | 2,610 | | 4,560 |
| 27 | 460 | 1,100 | | | |
| May 3 | 180 | 1,470 | 3,360 | | 5,010 |
| 11 | | 1,940 | 4,160 | | 6,100 |
| 17 | | 1,580 | 3,780 | | 5,360 |
| 25 | | 1,790 | 3,560 | | 5,350 |
| June 1 | | 2,240 | 4,500 | | 6,740 |
| 7 | | 2,660 | 5,830 | | 8,490 |
| 15 | | 2,700 | 6,130 | | 8,830 |
| 23 | | 3,260 | 6,880 | | 10,140 |
| 30 | 390 | 3,140 | 10,430 | | 13,960 |
| July 8 | | | | [a] 25,000 | [a] 25,000 |
| 20 | | 1,720 | 15,480 | | 17,200 |
| 25 | | | 11,220 | | |
| Aug. 3 | | 840 | | | |
| 10 | | 750 | | | |
| 18 | | 480 | | | |
| 24 | | 440 | | | |
| 31 | | 470 | | | |

[a] Estimated.

NOTE.—Figures in first four columns represent measurements; figures in fifth column are derived from the preceding.

*Daily gage height, in feet, of Imperial canal at California-Mexico boundary line near Yuma, Ariz., for 1903-4.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1903. | | | | | | | | | |
| 1 | 8.5 | 8.2 | 8.3 | 10.6 | 10.6 | ........ | 11.0 | 10.0 | [illegible] |
| 2 | 8.3 | 8.0 | 8.3 | 10.7 | 10.7 | ........ | 10.9 | 9.7 | [illegible] |
| 3 | 8.1 | 8.0 | 8.4 | 10.8 | 11.3 | ........ | 10.9 | ........ | 8.90 |
| 4 | 8.0 | 7.9 | 8.5 | 11.4 | 11.7 | ........ | 10.5 | 9.7 | 8.80 |
| 5 | 7.8 | 8.0 | 8.4 | 11.3 | ........ | 9.0 | 10.4 | 8.0 | 8.80 |
| 6 | 7.7 | 8.0 | 8.5 | 11.5 | ........ | 9.0 | 10.0 | 9.2 | [illegible] |
| 7 | 7.7 | 8.1 | 9.4 | 11.5 | ........ | 9.3 | 9.8 | 8.1 | 9.10 |
| 8 | 7.6 | 8.1 | 9.6 | 11.6 | ........ | ........ | 9.7 | 9.0 | [illegible] |
| 9 | 7.5 | 8.2 | 9.4 | 12.0 | ........ | ........ | 9.4 | 9.3 | [illegible] |
| 10 | 7.5 | 8.5 | 9.2 | 11.7 | ........ | ........ | 9.2 | 9.0 | [illegible] |
| 11 | 7.5 | 8.6 | 9.1 | 10.8 | ........ | ........ | 10.3 | 8.2 | [illegible] |
| 12 | 7.4 | 8.7 | 9.0 | 10.7 | ........ | 9.7 | 10.0 | 8.3 | [illegible] |
| 13 | 7.4 | 8.8 | 8.9 | 10.4 | ........ | ........ | 10.3 | 8.7 | [illegible] |
| 14 | 7.4 | 8.8 | 8.9 | 10.4 | ........ | ........ | 9.2 | 10.2 | [illegible] |
| 15 | 7.5 | 8.9 | 10.3 | 10.4 | ........ | ........ | 10.3 | ........ | [illegible] |
| 16 | 7.6 | 8.9 | 10.3 | 10.3 | ........ | 9.7 | 10.7 | 10.3 | [illegible] |
| 17 | 7.7 | 8.7 | 10.0 | 10.3 | ........ | 9.9 | 10.6 | 10.3 | 8.70 |
| 18 | 7.8 | 8.4 | 10.2 | 10.3 | ........ | ........ | 10.6 | 10.1 | [illegible] |
| 19 | 7.8 | 8.3 | 10.4 | 10.4 | ........ | 10.1 | 10.6 | 10.5 | 9.10 |
| 20 | 7.7 | 8.0 | 10.2 | 10.5 | ........ | 10.5 | 10.6 | 10.4 | ........ |
| 21 | 7.7 | 8.0 | 10.1 | 10.5 | ........ | 9.3 | 10.7 | ........ | [illegible] |
| 22 | 7.8 | 8.0 | 11.1 | 10.4 | ........ | 10.0 | 10.3 | ........ | 9.50 |
| 23 | 8.0 | 8.1 | 10.9 | 10.4 | ........ | 10.4 | 10.5 | 9.9 | ........ |
| 24 | 8.2 | 8.1 | 10.7 | 10.3 | ........ | 10.7 | 10.5 | 9.8 | 10.00 |
| 25 | 8.2 | 8.1 | 10.5 | 10.4 | ........ | 10.7 | 11.9 | 9.4 | ........ |
| 26 | 8.5 | 8.1 | 10.4 | 10.6 | ........ | 11.0 | 11.7 | 9.4 | 9.90 |
| 27 | 8.4 | 8.1 | 10.2 | 10.5 | ........ | 11.0 | 10.7 | 9.4 | 10.00 |
| 28 | 8.4 | 8.2 | 9.9 | 10.4 | ........ | ........ | 10.7 | 9.2 | 8.85 |
| 29 | 8.3 | ........ | 10.0 | 10.5 | ........ | 11.2 | 9.7 | 9.1 | 9.90 |
| 30 | 8.3 | ........ | 10.5 | 10.5 | ........ | 11.2 | 10.0 | 9.5 | 10.10 |
| 31 | 8.3 | ........ | 10.5 | ........ | ........ | ........ | 9.5 | 9.5 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903-4. | | | | | | | | | | | | | |
| 1 | 10.50 | 9.40 | 9.02 | 8.60 | 8.50 | 8.90 | 9.60 | 12.85 | 11.05 | 14.70 | 13.60 | 13.30 | 10.90 |
| 2 | 10.60 | 9.40 | 9.50 | 8.60 | 8.50 | 9.00 | 9.60 | 12.70 | 11.00 | 14.70 | 13.50 | 13.20 | [illegible] |
| 3 | 10.75 | 9.30 | 9.02 | 8.55 | 8.50 | 9.00 | 9.60 | 12.70 | 11.00 | 14.65 | 13.40 | 13.20 | 10.85 |
| 4 | 11.15 | 9.30 | 8.78 | 8.50 | 8.50 | 9.05 | 9.60 | 12.60 | 10.95 | 14.60 | 13.35 | 13.55 | 10.85 |
| 5 | 11.10 | 9.30 | 8.70 | 8.55 | 8.50 | 9.10 | 9.60 | 12.30 | 10.80 | 14.55 | 13.10 | 13.10 | 12.70 |
| 6 | 11.00 | 9.20 | 8.68 | 8.50 | 8.45 | 9.05 | 9.75 | 12.25 | 11.30 | (a) | 13.00 | 13.45 | 12.10 |
| 7 | 11.80 | 9.10 | 8.70 | 8.50 | 8.40 | 9.05 | 9.95 | 12.60 | 11.80 | (a) | 13.40 | 13.55 | ...... |
| 8 | 10.80 | 9.05 | 8.80 | 8.50 | 8.35 | 9.10 | 10.15 | 12.85 | 13.10 | (a) | 13.20 | 13.20 | ...... |
| 9 | 10.70 | 9.10 | 8.82 | 8.45 | 8.30 | 9.20 | 10.00 | 13.00 | 13.80 | (a) | 13.70 | 12.95 | ...... |
| 10 | 10.30 | 9.10 | 8.92 | 8.40 | 8.20 | 9.30 | 10.00 | 13.35 | 14.00 | (a) | 13.60 | 12.55 | 12.60 |
| 11 | 10.00 | 9.00 | 9.00 | 8.35 | 8.35 | 9.45 | 9.90 | 13.50 | 13.95 | (a) | 13.65 | 12.10 | ...... |
| 12 | 10.00 | 9.00 | 9.00 | 8.30 | 8.35 | 9.55 | 9.90 | 13.00 | 14.10 | (a) | 13.45 | 12.05 | ...... |
| 13 | 10.80 | 9.00 | 8.95 | 8.20 | 8.35 | 9.95 | 9.80 | 12.70 | a14.20 | (a) | 13.45 | 12.10 | ...... |
| 14 | 11.00 | 9.00 | 9.00 | b8.25 | 8.40 | 10.70 | 9.85 | 12.00 | 14.30 | (a) | 13.40 | 12.05 | ...... |
| 15 | 10.50 | 9.00 | 8.90 | b8.25 | 8.40 | 10.50 | 9.90 | 11.90 | 14.10 | (a) | 13.20 | 12.10 | 14.15 |
| 16 | 10.20 | 9.05 | 8.90 | b8.25 | 8.40 | 10.20 | 9.90 | 12.15 | 14.00 | (a) | 13.30 | 11.90 | (c) |
| 17 | 10.10 | 8.97 | 8.90 | b8.25 | 8.50 | 10.05 | 9.95 | 12.30 | 14.05 | (a) | 13.25 | 11.95 | ...... |
| 18 | 9.90 | 8.90 | 8.95 | 8.30 | 8.60 | 9.95 | 9.80 | 12.45 | 14.10 | (a) | 12.85 | 11.80 | ...... |
| 19 | 9.80 | 8.90 | 8.75 | 8.30 | 8.60 | 9.85 | 9.85 | 12.70 | 14.25 | (a) | 12.70 | 11.65 | ...... |
| 20 | 9.60 | 8.90 | 8.68 | 8.30 | 8.60 | 9.80 | 10.00 | 12.70 | 14.45 | (a) | 12.70 | 11.55 | ...... |
| 21 | 9.60 | 8.90 | 8.55 | 8.40 | 8.60 | 9.60 | 10.10 | 12.55 | 14.60 | (a) | 12.60 | 11.30 | ...... |
| 22 | 9.50 | 8.90 | 8.40 | 8.40 | 8.70 | 9.60 | 10.10 | 12.25 | 14.60 | (a) | 12.55 | 11.20 | ...... |
| 23 | 9.50 | 8.95 | 8.32 | 8.40 | 8.70 | 9.50 | 10.15 | 12.20 | 14.60 | (a) | 12.50 | 11.20 | ...... |
| 24 | 9.50 | 8.90 | 8.23 | 8.45 | 8.70 | 9.50 | 10.10 | 12.20 | 14.60 | (a) | 13.85 | 11.20 | ...... |
| 25 | 9.50 | 8.90 | d8.20 | 8.35 | 8.70 | 9.60 | 10.20 | 12.15 | 14.60 | (a) | 14.10 | 11.15 | ...... |
| 26 | 9.50 | 8.88 | d8.15 | 8.35 | 8.80 | 9.60 | 11.85 | 11.80 | 14.70 | (a) | 13.50 | 11.15 | ...... |
| 27 | 9.50 | 8.82 | d8.17 | 8.30 | 8.80 | 9.65 | 12.50 | 11.00 | 14.75 | 13.10 | 13.20 | 11.20 | ...... |
| 28 | 9.50 | 8.90 | d8.20 | 8.40 | 8.80 | 9.65 | 12.80 | 11.15 | 14.70 | 13.05 | 13.30 | 11.10 | ...... |
| 29 | 9.50 | 8.85 | d8.40 | 8.40 | 8.80 | 9.65 | 12.80 | 11.15 | 14.70 | 13.00 | 13.55 | 11.05 | ...... |
| 30 | 9.50 | 9.02 | d8.55 | 8.40 | ...... | 9.70 | 12.80 | 11.00 | 14.70 | 13.40 | 14.10 | 10.90 | ...... |
| 31 | 9.40 | ...... | d8.55 | 8.40 | ...... | 9.80 | ...... | 10.50 | ...... | 13.55 | 13.50 | ...... | ...... |

a Gage destroyed; replaced July 27.
b Estimated.
c Station discontinued.
d Assumed from height of river at Yuma.

*Portion of Colorado River diverted by Imperial canal during 1905.*

| Date. | Discharge of Colorado River in second-feet. | | Diversion by Imperial canal. | | Date. | Discharge of Colorado River in second-feet. | | Diversion by Imperial canal. | |
|---|---|---|---|---|---|---|---|---|---|
| | At Yuma. | Below heading No. 3 of Imperial canal. | Second-feet. | Per cent. | | At Yuma. | Below heading No. 3 of Imperial canal. | Second-feet. | Per cent. |
| Jan. 12.. | 6,300 | 5,400 | 900 | 14 | July 30.. | 17,500 | 2,480 | 15,020 | 86 |
| 26.. | 6,770 | 5,780 | 990 | 15 | Aug. 3.. | 14,700 | 2,000 | 12,700 | 86 |
| Feb. 8.. | 62,080 | 55,390 | 6,690 | 11 | 10.. | 16,200 | 2,220 | 13,980 | 86 |
| 14.. | 21,900 | 19,420 | 2,480 | 11 | 18.. | 10,300 | 1,170 | 9,130 | 89 |
| 28.. | 25,000 | 21,900 | 3,100 | 12 | 24.. | 7,550 | 770 | 6,780 | 90 |
| Mar. 8.. | 43,100 | 39,500 | 3,600 | 8 | 31.. | 7,500 | 560 | 6,940 | 93 |
| 18.. | 62,400 | 57,400 | 5,000 | 8 | Sept. 7.. | 5,060 | 90 | 4,970 | 98 |
| 21.. | 103,500 | 96,750 | 6,750 | 7 | 14.. | 9,670 | 1,230 | 8,440 | 87 |
| 28.. | 29,500 | 26,040 | 3,460 | 12 | 22.. | 6,080 | 180 | 5,900 | 97 |
| Apr. 6.. | 30,100 | 26,810 | 3,290 | 11 | 28.. | 5,280 | 40 | 5,240 | 99 |
| 20.. | 43,400 | 38,840 | 4,560 | 11 | Oct. 11.. | 12,950 | 1,010 | 11,940 | 92 |
| May 3.. | 39,700 | 34,690 | 5,010 | 13 | 18.. | 6,950 | 25 | 6,925 | 99½ |
| 11.. | 52,000 | 45,900 | 6,100 | 12 | 25.. | 5,970 | .......... | 5,970 | 100 |
| 17.. | 37,000 | 31,640 | 5,360 | 14 | 30.. | 5,670 | .......... | 5,670 | 100 |
| 25.. | 43,700 | 38,350 | 5,350 | 12 | Nov. 4.. | 5,750 | .......... | 5,750 | 100 |
| June 1.. | 61,500 | 54,760 | 6,740 | 11 | 11.. | 6,550 | .......... | 6,550 | 100 |
| 7.. | 69,500 | 61,010 | 8,490 | 12 | 18.. | 6,560 | 90 | 6,470 | 99 |
| 15.. | 82,000 | 73,170 | 8,830 | 11 | 25.. | 6,550 | 200 | 6,350 | 97 |
| 23.. | 89,800 | 79,660 | 10,140 | 11 | 30.. | 102,700 | a 70,000 | a 32,700 | 32 |
| 30.. | 61,500 | 47,540 | 13,960 | 23 | Dec. 7.. | 20,100 | 880 | 19,220 | 96 |
| July 8.. | 37,200 | 12,200 | a 25,000 | 67 | 13.. | 10,200 | .......... | 10,200 | 100 |
| 12.. | 31,720 | 11,610 | 20,110 | 63 | 17.. | 8,100 | .......... | 8,100 | 100 |
| 20.. | 22,250 | 5,050 | 17,200 | 77 | 23.. | 7,600 | .......... | 7,600 | 100 |
| 25.. | 20,650 | a 8,150 | a 12,500 | 61 | 31.. | 5,900 | .......... | 5,900 | 100 |

a Approximate.

*Estimated monthly discharge of Imperial canal during 1905.*

| Month. | Heading No. 1, including total diversion in United States. | | Headings Nos. 2 and 3, including total diversion in Mexico. | | Total discharge. | |
|---|---|---|---|---|---|---|
| | Second-feet. | Total in acre-feet. | Second-feet. | Total in acre-feet. | Second-feet. | Total in acre-feet. |
| January | 45 | 2,770 | 900 | 55,330 | 945 | 58,100 |
| February | 460 | 25,550 | 3,630 | 201,600 | 4,090 | 227,200 |
| March | 1,370 | 84,240 | 3,330 | 204,800 | 4,700 | 289,000 |
| April | 555 | 33,020 | 3,370 | 200,500 | 3,925 | 233,600 |
| May | 20 | 1,230 | 5,435 | 334,200 | 5,455 | 335,400 |
| June | 200 | 11,900 | 9,430 | 561,100 | 9,630 | 573,000 |
| July | 130 | 7,990 | 17,840 | 1,097,000 | 17,960 | 1,105,600 |
| August | ........ | .......... | 9,905 | 609,000 | 9,905 | 609,000 |
| September | ........ | .......... | 6,140 | 365,400 | 6,140 | 365,400 |
| October | ........ | .......... | 7,625 | 468,800 | 7,625 | 468,800 |
| November | ........ | .......... | 8,400 | 500,000 | a 8,400 | a 500,000 |
| December | ........ | .......... | 12,200 | 750,000 | a 12,200 | a 750,000 |
| The year | 232 | 166,700 | 7,350 | 5,348,000 | 7,582 | 5,514,000 |

a Approximate.

## IMPERIAL VALLEY CANALS.

In July, 1904, stations were established on all canals entering the Imperial Valley, as follows: Holt canal, Hemlock canal, Alamo channel, Alamitos canal, Main canal, and Boundary canal. These stations

are located on United States territory, and each is near the [illegible] Mexico boundary line.

Discharge measurements were made from footbridges [illegible] at each station.

The gages were vertical 4 by 4 inch timbers substantially [illegible] in the ground. Automatic water-stage registers, from [illegible] daily gage-height record was compiled, were placed at the [illegible] stations mentioned above. These canals enter the valle[illegible] Calexico, Cal.

In October, 1904, canal No. 6, or Wisteria canal, was [illegible] [illegible] across the valley west of Calexico, Cal. A station [illegible] [illegible] weekly discharge mea[illegible] [illegible] the Holt canal supplied a [illegible] [illegible] which had been [illegible] [illegible] levee. A [illegible] [illegible] replace the Holt, [illegible] [illegible] A station was also establish[illegible] [illegible] canal diverted [illegible] [illegible] New River below [illegible] [illegible] canal. [illegible] [illegible] no automatic [illegible]

[illegible]

*Discharge measurements of Holt canal near Calexico, Cal., in 1904-5.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| July 14 | W. V. Hardy | 2.02 | 62.0 | Mar. 13 | R. R. McCostin | 1.88 | 51 |
| 23 | do | 1.79 | 53.6 | 20 | do | 2.06 | 64 |
| 26 | do | 1.75 | 48.4 | 27 | do | 2.84 | 118 |
| 29 | do | 1.72 | 44.0 | Apr. 3 | do | 2.81 | 131 |
| Aug. 2 | do | 1.70 | 42.0 | 10 | do | 1.13 | 21 |
| 5 | do | 1.70 | 41.8 | 17 | do | 3.70 | 246 |
| 10 | do | 1.88 | 50.0 | 24 | do | 3.70 | 256 |
| 17 | do | 2.03 | 59.0 | May 1 | do | 3.37 | 202 |
| 23 | do | 1.96 | 56.0 | 8 | do | 2.76 | 143 |
| 26 | do | 1.97 | 56.0 | 15 | do | 2.91 | 163 |
| Sept. 3 | Hardy and La Rue | 2.03 | 60.0 | 22 | do | 2.92 | 169 |
| 10 | do | 2.14 | 61.0 | 29 | do | 2.70 | 128 |
| 18 | do | 1.63 | 37.0 | June 5 | do | 2.86 | 150 |
| 24 | S. M. Smith | 1.60 | 36.0 | 12 | do | 3.02 | 177 |
| 27 | do | 1.55 | 33.0 | 18 | do | 1.69 | 57 |
| Oct. 1 | do | 1.90 | 49.0 | 26 | do | 1.64 | 50 |
| 5 | do | 1.73 | 41.0 | July 3 | do | .38 | 6.9 |
| 8 | do | 2.03 | 56.0 | 10 | do | .33 | 6.1 |
| 15 | do | 1.97 | 48.0 | 17 | do | .35 | 5.8 |
| 22 | do | 1.96 | 47.0 | 24 | do | .36 | 4.8 |
| 29 | do | 1.61 | 30.0 | 31 | do | .36 | 4.2 |
| Nov. 4 | do | 1.62 | 36.3 | Aug. 7 | do | 1.45 | 30 |
| 11 | Hardy and Smith | 1.95 | 54.0 | 14 | do | 1.25 | 38 |
| 18 | W. V. Hardy | 1.92 | 50.0 | 21 | do | ...... | 85 |
| 25 | do | 1.72 | 40.0 | 21 | do | .039 | 5.1 |
| Dec. 2 | do | 1.52 | 32.0 | 28 | do | 2.62 | 133 |
| 8 | do | 1.65 | 37.0 | Sept. 4 | do | 2.67 | 131 |
| 15 | do | 1.46 | 27.0 | Oct. 10 | W. V. Hardy | 3.06 | 169 |
| 22 | do | 1.58 | 32.0 | 17 | do | .25 | 2 |
| | | | | 23 | do | 2.65 | 128 |
| 1905. | | | | Nov. 6 | do | 1.40 | 21 |
| Jan. 4 | W. V. Hardy | 1.30 | 19.5 | 13 | do | 1.51 | 35 |
| 12 | do | 1.41 | 30 | 20 | do | 1.33 | 40 |
| 19 | do | 1.43 | 28 | 29 | do | 1.31 | 22 |
| 26 | do | 1.23 | 19.5 | Oct. 30 | do | 2.55 | 124 |
| Feb. 2 | do | 1.23 | 18.1 | Sept. 11 | do | 2.88 | 159 |
| 9 | do | 1.07 | 13.5 | 25 | do | 2.75 | 128 |
| 17 | do | 1.90 | 40 | Oct. 2 | do | 2.80 | 137 |
| 24 | do | .93 | 11.1 | | | | |

*Daily gage height, in feet, of Holt canal near Calexico, Cal., for 1904-5.*

| Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | 1904. | | | | 1904. | | | |
| 1 | ...... | 1.85 | 2.00 | 11 | ...... | 1.90 | 2.15 | 21 | ...... | (2.05) | 1.65 |
| 2 | ...... | 1.70 | 2.10 | 12 | ...... | 1.90 | 2.10 | 22 | 1.80 | (2.00) | 1.55 |
| 3 | ...... | 1.70 | 2.00 | 13 | ...... | 1.95 | 1.90 | 23 | 1.80 | 1.95 | 1.55 |
| 4 | ...... | 1.70 | 2.00 | 14 | ...... | 1.95 | 1.70 | 24 | 1.75 | (1.95) | 1.55 |
| 5 | ...... | 1.70 | 2.00 | 15 | ...... | 2.00 | 1.65 | 25 | 1.70 | (1.95) | 1.55 |
| 6 | ...... | 1.65 | 1.90 | 16 | ...... | 2.00 | 1.60 | 26 | 1.75 | 1.95 | 1.50 |
| 7 | ...... | 1.60 | 1.90 | 17 | ...... | 2.05 | 1.55 | 27 | 1.80 | 2.00 | 1.55 |
| 8 | ...... | 1.80 | 2.10 | 18 | ...... | 2.05 | 1.60 | 28 | 1.75 | 2.05 | 1.50 |
| 9 | ...... | 1.85 | 2.10 | 19 | ...... | 2.05 | 1.60 | 29 | 1.70 | 2.00 | 1.50 |
| 10 | ...... | 1.90 | 2.15 | 20 | ...... | (2.05) | 1.60 | 30 | 1.35 | 1.90 | 1.70 |
| | | | | | | | | 31 | 1.90 | 2.00 | ...... |

*Daily gage height, in feet, of Holt canal near Calexico, Cal., for 1904-5*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904-5. | | | | | | | | | | | | |
| 1 | 1.90 | 1.60 | 1.60 | (1.0) | 1.25 | 1.4 | 2.85 | 3.3 | 2.8 | 0.0 | 0.35 | 3.05 |
| 2 | 1.80 | 1.55 | 1.55 | (1.0) | 1.25 | 1.3 | 2.9 | 3.25 | 2.85 | .0 | .35 | 3.0 |
| 3 | 1.80 | 1.55 | 1.50 | (1.2) | 1.25 | (1.45) | 2.8 | 3.3 | 2.8 | .4 | .35 | 2.75 |
| 4 | 1.80 | 1.60 | 1.55 | (1.3) | 1.25 | (1.6) | 2.5 | 3.2 | 2.8 | .35 | .5 | 2.65 |
| 5 | 1.75 | 1.70 | 1.60 | (1.3) | 1.25 | (1.4) | 2.6 | 2.9 | 2.85 | .35 | 1.15 | 2.7 |
| 6 | 1.70 | 1.80 | 1.75 | (1.5) | 1.3 | 1.4 | 3.05 | (2.75) | 2.95 | .35 | 1.45 | 2.9 |
| 7 | 1.80 | 1.65 | 1.65 | (1.5) | 1.15 | 1.55 | (3.3) | (2.75) | 3.0 | .35 | 1.55 | 2.7 |
| 8 | 2.00 | 2.15 | 1.65 | (1.5) | (1.1) | 1.7 | (3.25) | 2.75 | 2.95 | .35 | 1.65 | 2.5 |
| 9 | 2.00 | 2.15 | 1.60 | (1.5) | 1.05 | 1.8 | (3.25) | 2.75 | 3.0 | .35 | 1.65 | 2.75 |
| 10 | 1.85 | 2.05 | 1.60 | (1.5) | 1.05 | 1.65 | 2.15 | 2.75 | 3.05 | .35 | 1.65 | 2.55 |
| 11 | 1.80 | 2.00 | 1.65 | (1.5) | 1.05 | (1.8) | 3.6 | 2.75 | 3.0 | .35 | 1.55 | 2.9 |
| 12 | 1.85 | 1.90 | 1.65 | 1.4 | 1.0 | (1.9) | 3.65 | 2.8 | 2.95 | .35 | 1.35 | 3.0 |
| 13 | 1.90 | 1.90 | 1.65 | 1.4 | 1.2 | 1.95 | 3.6 | 2.9 | 2.6 | .35 | 1.3 | 3.1 |
| 14 | 1.85 | 1.90 | 1.60 | 1.35 | 1.4 | 2.0 | 3.55 | 2.9 | 2.5 | .35 | 1.25 | 3.05 |
| 15 | 1.80 | 1.85 | 1.50 | 1.35 | 1.6 | 1.55 | 3.65 | 2.85 | 2.5 | .35 | 1.1 | 3.0 |
| 16 | 1.90 | 1.85 | 1.50 | 1.35 | 1.75 | 1.3 | 3.65 | 2.9 | 2.5 | .35 | .95 | 3.1 |
| 17 | 1.90 | 1.90 | 1.45 | 1.35 | 1.8 | 1.5 | 3.7 | 2.85 | 2.0 | .35 | .95 | 3.15 |
| 18 | 1.95 | 1.90 | 1.50 | 1.35 | 1.35 | 1.55 | 3.8 | 2.85 | 1.75 | .35 | .95 | 3.1 |
| 19 | 1.95 | 1.90 | 1.50 | 1.4 | 1.4 | 1.95 | 3.75 | 2.9 | 1.7 | .35 | 1.0 | 2.6 |
| 20 | 1.95 | 1.90 | 1.45 | 1.55 | 1.4 | 1.8 | 3.8 | 2.9 | 1.65 | .35 | 1.0 | 2.3 |
| 21 | 2.00 | 1.85 | 1.55 | 1.65 | 1.4 | 1.85 | 3.75 | 2.95 | 1.65 | .35 | 1.05 | 2.75 |
| 22 | 1.95 | 1.85 | 1.55 | 1.7 | 1.4 | 2.05 | 3.75 | 2.95 | 1.6 | .35 | 1.5 | 2.95 |
| 23 | 1.85 | 1.80 | 1.45 | 1.6 | 1.4 | 2.2 | 3.75 | 2.7 | 1.65 | .35 | 1.95 | 2.9 |
| 24 | 1.75 | 1.75 | 1.25 | (1.45) | .95 | 2.35 | 3.7 | 2.6 | 1.6 | .35 | 2.0 | 2.8 |
| 25 | 1.60 | 1.75 | 1.20 | 1.3 | 1.1 | 2.2 | 3.5 | 2.5 | 1.65 | .35 | 2.0 | 2.0 |
| 26 | 1.65 | 1.75 | 1.05 | (1.25) | 1.4 | (2.6) | 3.35 | 2.45 | 1.65 | .35 | 2.0 | 1.35 |
| 27 | 1.70 | 1.75 | 1.10 | 1.1 | 1.55 | 2.85 | 3.35 | 2.5 | 0 | .35 | 2.0 | 2.25 |
| 28 | 1.65 | 1.70 | 1.05 | .95 | 1.5 | 2.8 | 3.35 | 2.55 | 0 | .35 | 2.6 | 2.8 |
| 29 | 1.60 | 1.70 | (1.05) | 1.0 | ...... | 2.6 | 3.35 | 2.9 | 0 | .35 | 2.7 | 2.8 |
| 30 | 1.60 | 1.65 | (1.05) | (1.1) | ...... | 2.7 | 3.35 | 2.7 | 0 | .35 | 2.75 | 2.8 |
| 31 | 1.60 | ...... | (1.05) | (1.2) | ...... | 2.8 | ...... | 2.65 | ...... | .35 | 2.85 | ...... |

NOTE.—Gage heights in parentheses are estimated.

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | 1905. | | | | 1905. | | | |
| 1 | 2.8 | 2.0 | 1.3 | 11 | 3.15 | 1.45 | 2.7 | 21 | 1.3 | 0.95 | ...... |
| 2 | 2.8 | 1.7 | 2.6 | 12 | 1.25 | 1.5 | ...... | 22 | 1.5 | .9 | ...... |
| 3 | 2.8 | 1.7 | 2.8 | 13 | .25 | 1.55 | ...... | 23 | 2.65 | .95 | ...... |
| 4 | 2.85 | 1.7 | 3.0 | 14 | .25 | 1.7 | ...... | 24 | 2.65 | 1.0 | ...... |
| 5 | 2.85 | 1.5 | 3.0 | 15 | .25 | 1.1 | ...... | 25 | 2.7 | .95 | ...... |
| 6 | 2.95 | 1.4 | 2.95 | 16 | .25 | .95 | ...... | 26 | 2.7 | .95 | ...... |
| 7 | 3.1 | 1.35 | 2.9 | 17 | .25 | .9 | ...... | 27 | 2.7 | .85 | ...... |
| 8 | 3.1 | 1.35 | 2.9 | 18 | .25 | .9 | ...... | 28 | 2.7 | .8 | ...... |
| 9 | 3.15 | 1.35 | 2.85 | 19 | .25 | .85 | ...... | 29 | 2.6 | .9 | ...... |
| 10 | 3.05 | 1.4 | 2.7 | 20 | 1.2 | 1.05 | ...... | 30 | 2.4 | 1.25 | ...... |
| | | | | | | | | 31 | 2.3 | ...... | ...... |

*Monthly discharge of Holt canal near Calexico, Cal., for 1905.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| January | 40 | 10 | 24.8 | 1,525 |
| February | 35 | 9 | 21.0 | 1,166 |
| March | 123 | 23 | 57.4 | 3,530 |
| April | 260 | 83 | 208 | 12,380 |
| May | 210 | 109 | 152 | 9,346 |
| June | 181 | 0 | [a] 150 | 8,926 |
| July | 7 | 0 | [a] 150 | 9,223 |
| August | 158 | 3 | [a] 150 | 9,223 |
| September | 202 | 35 | 144 | 8,569 |
| October | 196 | 2 | 96.6 | 5,940 |
| November | 71 | 8 | 27.0 | 1,607 |
| The period | | | | 71,430 |

[a] Estimated. Flood water used for irrigation. Beginning with Mar. 6 Holt heading was used to divert water in No. 5 main canal, but its capacity was not sufficient until Apr. 16.

*Monthly discharge of New Holt or No. 7 canal near Calexico, Cal., for 1905.*

| Month. | Discharge in second-feet. | | | Total (in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| May | | | 18 | 1,107 |
| June | | | 33 | 1,964 |
| July | | | 33 | 2,029 |
| August | | | 33 | 2,029 |
| September | | | 33 | 1,964 |
| October | | | 33 | 2,029 |
| November | | | 33 | 1,964 |
| The period | | | | 13,090 |

NOTE.—The station record is of no value because most of the water used was obtained from flooded basins to the east. The mean discharge for the entire district covered by the canal was estimated in the field at 33 second-feet.

*Discharge measurements of Hemlock canal near Celestino, Cal., in 1904–5.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1904. | | Feet. | Sec.-ft. | 1905. | | Feet. | Sec.-ft. |
| July [illegible] | W. V. Hardy | 1 [illegible] | 4.4 | Mar. [illegible] | R. E. McCastin | [illegible] | [illegible] |
| [illegible] | do | [illegible] | 4.4 | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | 4.1 | [illegible] | do | [illegible] | [illegible] |
| Aug. 2 | do | [illegible] | [illegible] | Apr. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | 4.4 | [illegible] | do | 2.[illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | May [illegible] | do | [illegible] | [illegible] 4 |
| [illegible] | do | [illegible] | 4.[illegible] | [illegible] | do | [illegible] | [illegible] 4 |
| Sept. 1 | Hardy and [illegible] | [illegible] | 4.[illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | 22 | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | 1.[illegible] | [illegible] | June [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | 1.[illegible] | 4.[illegible] | [illegible] | do | [illegible] | [illegible] |
| Oct. [illegible] | do | 1.[illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | 1.[illegible] | [illegible] | July [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| 22 | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] 9 |
| [illegible] | do | .[illegible] | [illegible] | 24 | do | [illegible] | [illegible].5 |
| Nov. 4 | do | 1.[illegible] | 4.4 | [illegible] | do | 1.[illegible] | [illegible].9 |
| [illegible] | Hardy and [illegible] | 1.[illegible] | [illegible] | Aug. [illegible] | do | 1.[illegible] | 12.[illegible] |
| [illegible] | [illegible] Hardy | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible].4 |
| [illegible] | do | 1.[illegible] | [illegible] | [illegible] | do | 1.[illegible] | 9.[illegible] |
| Dec. 2 | do | 1.[illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | 1.[illegible] | [illegible] | Sept. 4 | W. V. Hardy | [illegible] | 4.4 |
| [illegible] | do | 1.[illegible] | [illegible] | [illegible] | do | 1.[illegible] | [illegible] |
| 22 | do | .[illegible] | 1.[illegible] | [illegible] | do | [illegible] | 2.[illegible] |
| | | | | Oct. [illegible] | do | 1.11 | [illegible] 3 |
| 1905. | | | | [illegible] | do | 1.30 | [illegible] 3 |
| Jan. 6 | W. V. Hardy | [illegible] | 2.[illegible] | [illegible] | do | 1.12 | [illegible] |
| [illegible] | do | [illegible] | 2.2 | [illegible] | do | 1.[illegible] | [illegible] 4 |
| [illegible] | do | 1.[illegible] | 9.5 | [illegible] | do | 1.[illegible] | [illegible] |
| 28 | do | 0.[illegible] | 1.9 | Nov. 6 | do | [illegible].90 | 4.[illegible] |
| Feb. 2 | do | 1.[illegible] | 7.4 | 13 | do | 1.00 | [illegible].4 |
| 9 | do | 1.[illegible] | [illegible] 4 | [illegible] | do | [illegible].70 | [illegible] |
| 17 | R. E. McCastin | 1.[illegible] | 12.5 | [illegible] | do | 0.[illegible] | [illegible].1 |
| 24 | do | 1.[illegible] | [illegible].2 | | | | |

*Daily gage height, in feet, of Hemlock canal near Celestino, Cal., for 1904–5.*

| Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | 1904. | | | | 1904. | | | |
| 1 | | 0.[illegible] | 0.[illegible] | 11 | | 1.[illegible] | 1.[illegible] | 21 | | (1.05) | 1.[illegible] |
| 2 | | .[illegible] | .[illegible] | 12 | | .[illegible] | 1.[illegible] | 22 | 1.00 | (1.05) | 1.[illegible] |
| 3 | | .[illegible] | 1.[illegible] | 13 | | .[illegible] | 1.[illegible] | 23 | .95 | 1.05 | 1.[illegible] |
| 4 | | 1.[illegible] | 1.[illegible] | 14 | | 1.[illegible] | 1.[illegible] | 24 | 1.00 | (1.05) | 1.[illegible] |
| 5 | | 1.20 | 1.05 | 15 | | 1.[illegible] | 1.05 | 25 | 1.05 | (1.00) | 1.[illegible] |
| 6 | | 1.30 | 1.05 | 16 | | 1.05 | 1.[illegible] | 26 | 1.15 | 1.00 | 1.[illegible] |
| 7 | | [illegible] | 1.[illegible] | 17 | | [illegible] | 1.[illegible] | 27 | 1.15 | (1.05) | 1.[illegible] |
| 8 | | [illegible] | 1.[illegible] | 18 | | 1.[illegible] | 1.20 | 28 | .75 | (1.05) | 1.[illegible] |
| 9 | | .[illegible] | 1.05 | 19 | | 1.[illegible] | 1.[illegible] | 29 | 1.15 | (1.2[illegible]) | 1.[illegible] |
| 10 | | 1.00 | 1.10 | 20 | | 1.05 | 1.35 | 30 | 1.15 | (1.25) | 1.[illegible] |
| | | | | | | | | 31 | 1.00 | (1.05) | |

a Dry.

*Daily gage height, in feet, of Hemlock canal near Calexico, Cal., for 1904–5*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 1 | 1.70 | 1.05 | 1.30 | 1.0 | 1.0 | 0.9 | (1.8) | 1.1 | 1.55 | 1.6 | 1.2 | 1.15 |
| 2 | 1.30 | 1.10 | 1.40 | .9 | 1.25 | .9 | 1.9 | 1.06 | 1.55 | 1.3 | 1.2 | 1.1 |
| 3 | 1.40 | 1.15 | 1.40 | .96 | 1.3 | .9 | 1.95 | 1.2 | 1.6 | 1.25 | 1.2 | .9 |
| 4 | 1.35 | 1.15 | 1.40 | 1.0 | 1.3 | .9 | 1.8 | 1.35 | 1.7 | 1.2 | 1.3 | .95 |
| 5 | 1.15 | 1.30 | 1.30 | 1.05 | 1.1 | 1.06 | 2.0 | 1.7 | 1.8 | 1.2 | 1.3 | 1.2 |
| 6 | 1.05 | 1.25 | .96 | 1.15 | .9 | 1.25 | (2.0) | 1.96 | 1.9 | 1.2 | 1.4 | 1.35 |
| 7 | 1.46 | 1.35 | 1.15 | 1.3 | .9 | 1.3 | (1.9) | 2.0 | 1.96 | 1.55 | 1.45 | 1.35 |
| 8 | 1.15 | 1.40 | 1.15 | 1.4 | 1.0 | 1.3 | (1.6) | 2.1 | 2.06 | 1.75 | 1.4 | 1.35 |
| 9 | .95 | 1.35 | 1.10 | 1.0 | 1.45 | 1.5 | (1.5) | 2.1 | 2.1 | 1.75 | 1.4 | 1.35 |
| 10 | .80 | 1.30 | 1.10 | .75 | 1.45 | 1.25 | (1.4) | 2.1 | 2.15 | 1.75 | 1.4 | 1.4 |
| 11 | .75 | 1.30 | 1.10 | .75 | 1.35 | 1.25 | (1.6) | 2.1 | 2.15 | 1.75 | 1.5 | 1.4 |
| 12 | .95 | 1.30 | 1.10 | .75 | 1.35 | 1.3 | (1.7) | 2.1 | .8 | 1.75 | 1.55 | 1.45 |
| 13 | .96 | 1.30 | 1.10 | .75 | 1.1 | 1.2 | 1.9 | 2.1 | .8 | 1.7 | 1.55 | 1.3 |
| 14 | 1.30 | 1.30 | 1.10 | .75 | 1.15 | 1.05 | 1.8 | 2.1 | .9 | 1.7 | 1.6 | 1.55 |
| 15 | 1.45 | 1.35 | 1.00 | .75 | 1.4 | .96 | 2.0 | 1.96 | .9 | 1.7 | 1.4 | 1.55 |
| 16 | 1.45 | 1.45 | 1.00 | .75 | 1.8 | .9 | (2.2) | 2.0 | .9 | 1.7 | 1.25 | 1.55 |
| 17 | 1.45 | 1.45 | .96 | .75 | 1.6 | 1.06 | 2.45 | 1.96 | 1.4 | 1.7 | 1.2 | 1.55 |
| 18 | 1.45 | 1.35 | .96 | 1.0 | 1.75 | 1.0 | 2.5 | 1.85 | 1.7 | 1.8 | 1.2 | 1.3 |
| 19 | 1.45 | 1.30 | .90 | 1.4 | 1.75 | 1.06 | 2.2 | 1.85 | 1.65 | 1.85 | 1.2 | .96 |
| 20 | 1.50 | 1.30 | .90 | 1.55 | 1.65 | 1.45 | 2.45 | 1.8 | 1.6 | 1.45 | 1.2 | 1.0 |
| 21 | 1.50 | 1.30 | .90 | (1.4) | 1.5 | 1.5 | 2.35 | 1.75 | 1.55 | 1.0 | 1.25 | 1.06 |
| 22 | 1.50 | 1.30 | .90 | (1.3) | 1.45 | 1.4 | 2.3 | 1.75 | 1.5 | 1.0 | 1.2 | 1.0 |
| 23 | 1.45 | 1.30 | .85 | (1.2) | 1.55 | 1.25 | (2.0) | 1.7 | 1.3 | 1.0 | 1.2 | 1.0 |
| 24 | 1.35 | 1.30 | .80 | (1.0) | 1.8 | 1.3 | 1.45 | 1.75 | 1.75 | .75 | 1.2 | .9 |
| 25 | 1.25 | 1.30 | .90 | (.9) | 1.65 | 1.55 | 1.45 | (1.7) | 1.95 | .75 | 1.2 | .95 |
| 26 | 1.15 | 1.30 | .65 | .85 | 1.06 | 1.55 | 1.2 | (1.65) | 1.85 | .75 | 1.2 | 1.0 |
| 27 | 1.05 | 1.30 | .60 | 1.0 | .9 | 1.75 | 1.1 | (1.6) | 1.8 | .75 | 1.2 | 1.0 |
| 28 | 1.00 | 1.30 | .75 | 1.0 | .9 | 1.55 | 1.1 | (1.55) | 1.8 | 1.05 | 1.1 | .9 |
| 29 | 1.00 | 1.25 | (.75) | .7 | ...... | 1.15 | 1.1 | 1.5 | 1.75 | 1.25 | 1.1 | .95 |
| 30 | 1.05 | 1.20 | (.75) | .6 | ...... | 1.5 | 1.1 | 1.55 | 1.75 | 1.25 | 1.05 | .95 |
| 31 | 1.05 | ...... | (.75) | .55 | ...... | 1.9 | ...... | 1.6 | ...... | 1.25 | 1.0 | ...... |

NOTE.—Gage heights in parentheses are estimated.

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | 1905. | | | | 1905. | | | |
| 1 | 1.0 | 1.1 | 1.0 | 11 | 1.4 | 1.05 | ...... | 21 | 1.0 | 0.8 | ...... |
| 2 | 1.1 | 1.15 | 1.0 | 12 | 1.35 | 1.1 | ...... | 22 | 1.0 | .9 | ...... |
| 3 | 1.1 | 1.25 | 2.0 | 13 | 1.5 | 1.05 | ...... | 23 | 1.2 | .85 | ...... |
| 4 | 1.15 | 1.1 | 1.5 | 14 | 1.0 | .95 | ...... | 24 | 1.15 | .75 | ...... |
| 5 | 1.2 | .95 | 1.5 | 15 | 1.15 | .75 | ...... | 25 | 1.05 | .75 | ...... |
| 6 | 1.3 | .9 | 1.7 | 16 | 1.25 | .8 | ...... | 26 | 1.05 | .75 | ...... |
| 7 | 1.45 | .9 | 1.65 | 17 | 1.1 | .8 | ...... | 27 | 1.1 | .75 | ...... |
| 8 | 1.45 | .9 | 1.6 | 18 | 1.0 | .85 | ...... | 28 | 1.1 | .85 | ...... |
| 9 | 1.4 | .95 | 1.55 | 19 | 1.05 | .8 | ...... | 29 | 1.2 | .95 | ...... |
| 10 | 1.35 | 1.0 | 1.6 | 20 | 1.1 | .7 | ...... | 30 | .9 | 1.3 | ...... |
| | | | | | | | | 31 | .85 | ...... | ...... |

*Discharge measurements of Hemlock canal near Calexico, Cal., in 1904–5.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* | | | *Feet.* | *Sec.-ft.* |
| 1904. | | | | 1905. | | | |
| July 23 | W. V. Hardy | 0.95 | 4.4 | Mar. 13 | R. R. McCoslin | 1.20 | 8.7 |
| 26 | ....do | 1.15 | 6.4 | 20 | ....do | 1.45 | 13.2 |
| 29 | ....do | 1.14 | 6.0 | 27 | ....do | 1.73 | 23.0 |
| Aug. 2 | ....do | .92 | 3.6 | Apr. 3 | ....do | 1.85 | 20.0 |
| 5 | ....do | 1.20 | 7.3 | 10 | ....do | 1.42 | 12.7 |
| 10 | ....do | 1.00 | 4.4 | 17 | ....do | 2.45 | 36.0 |
| 17 | ....do | 1.08 | 5.7 | 24 | ....do | 0.70 | 1.6 |
| 23 | ....do | 1.03 | 5.0 | May 1 | ....do | 1.10 | 6.4 |
| 26 | ....do | 1.02 | 4.9 | 8 | ....do | 2.04 | 20.4 |
| Sept. 3 | Hardy and LaRue | 1.02 | 4.3 | 15 | ....do | 1.94 | 18.6 |
| 10 | ....do | 1.07 | 4.6 | 22 | ....do | 1.75 | 14.5 |
| 18 | ....do | 1.44 | 11.5 | 29 | ....do | 1.54 | 12.1 |
| 24 | S. M. Smith | 1.10 | 3.9 | June 5 | ....do | 1.81 | 16.9 |
| 27 | ....do | 1.10 | 4.5 | 12 | ....do | 0.78 | 2.1 |
| Oct. 1 | ....do | 1.79 | 14.5 | 18 | ....do | 1.7 | 13.2 |
| 5 | ....do | 1.15 | 5.4 | 26 | ....do | 1.96 | 21.0 |
| 8 | ....do | 1.31 | 8.2 | July 3 | ....do | 1.23 | 7.2 |
| 15 | ....do | 1.45 | 8.8 | 10 | ....do | 1.73 | 17.9 |
| 22 | ....do | 1.50 | 10.6 | 17 | ....do | 1.69 | 15.9 |
| 29 | ....do | .98 | 3.1 | 24 | ....do | 0.75 | 0.8 |
| Nov. 4 | ....do | 1.13 | 6.4 | 31 | ....do | 1.23 | 7.9 |
| 11 | Hardy and Smith | 1.29 | 8.0 | Aug. 7 | ....do | 1.43 | 12.7 |
| 18 | W. V. Hardy | 1.31 | 8.2 | 14 | ....do | 1.59 | 17.4 |
| 25 | ....do | 1.28 | 8.0 | 21 | ....do | 1.23 | 9.8 |
| Dec. 2 | ....do | 1.39 | 9.5 | 28 | ....do | 1.12 | 7.3 |
| 8 | ....do | 1.13 | 6.3 | Sept. 4 | W. V. Hardy | 0.97 | 4.4 |
| 15 | ....do | 1.04 | 3.3 | 11 | ....do | 1.42 | 13.3 |
| 22 | ....do | .88 | 1.8 | 25 | ....do | 0.82 | 2.1 |
| | | | | Oct. 2 | ....do | 1.11 | 7.3 |
| 1905. | | | | 10 | ....do | 1.30 | 8.3 |
| Jan. 4 | W. V. Hardy | 0.87 | 2.0 | 17 | ....do | 1.12 | 8.0 |
| 12 | ....do | 0.88 | 2.2 | 23 | ....do | 1.20 | 8.4 |
| 19 | ....do | 1.41 | 9.5 | 30 | ....do | 1.04 | 5.2 |
| 26 | ....do | 0.84 | 1.9 | Nov. 6 | ....do | 0.90 | 4.0 |
| Feb. 2 | ....do | 1.25 | 7.4 | 13 | ....do | 1.00 | 6.4 |
| 9 | ....do | 1.64 | 16.4 | 20 | ....do | 0.70 | 2.0 |
| 17 | R. R. McCoslin | 1.59 | 12.5 | 29 | ....do | 0.89 | 3.1 |
| 24 | ....do | 1.79 | 17.2 | | | | |

*Daily gage height, in feet, of Hemlock canal near Calexico, Cal., for 1904–5.*

| Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | 1904. | | | | 1904. | | | |
| 1 | | 0.95 | 0.95 | 11 | | 1.00 | 1.10 | 21 | | (1.05) | 1.10 |
| 2 | | .90 | .95 | 12 | | .80 | 1.05 | 22 | 1.00 | (1.05) | 1.00 |
| 3 | | .95 | 1.00 | 13 | | .90 | 1.05 | 23 | .95 | 1.05 | 1.00 |
| 4 | | 1.10 | 1.05 | 14 | | 1.05 | 1.00 | 24 | 1.00 | (1.05) | 1.00 |
| 5 | | 1.20 | 1.05 | 15 | | 1.05 | 1.05 | 25 | 1.05 | (1.00) | 1.05 |
| 6 | | 1.30 | 1.05 | 16 | | 1.05 | 1.10 | 26 | 1.15 | 1.00 | 1.10 |
| 7 | | (a) | 1.05 | 17 | | 1.10 | 1.05 | 27 | 1.15 | (1.05) | 1.25 |
| 8 | | (a) | 1.05 | 18 | | 1.05 | 1.20 | 28 | .75 | (1.05) | 1.45 |
| 9 | | .90 | 1.05 | 19 | | 1.10 | 1.65 | 29 | 1.15 | (1.20) | 1.35 |
| 10 | | 1.00 | 1.10 | 20 | | (1.05) | 1.35 | 30 | 1.15 | (1.25) | 1.35 |
| | | | | | | | | 31 | 1.00 | (1.05) | |

a Dry.

*Daily gage height, in feet, of Hemlock canal near Calexico, Cal., for 1904-5*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904-5. | | | | | | | | | | | | |
| 1 | 1.70 | 1.05 | 1.20 | 1.0 | 1.0 | 0.9 | (1.8) | 1.1 | 1.55 | 1.6 | 1.2 | 1.15 |
| 2 | 1.50 | 1.10 | 1.40 | .9 | 1.25 | .9 | 1.9 | 1.05 | 1.55 | 1.5 | 1.2 | 1.1 |
| 3 | 1.40 | 1.15 | 1.40 | .95 | 1.3 | .9 | 1.85 | 1.2 | 1.6 | 1.25 | 1.2 | .9 |
| 4 | 1.35 | 1.15 | 1.40 | 1.0 | 1.3 | .9 | 1.8 | 1.35 | 1.7 | 1.2 | 1.3 | .95 |
| 5 | 1.15 | 1.20 | 1.30 | 1.05 | 1.1 | 1.05 | 2.0 | 1.7 | 1.8 | 1.2 | 1.3 | 1.2 |
| 6 | 1.05 | 1.25 | .95 | 1.15 | .8 | 1.25 | (2.0) | 1.95 | 1.9 | 1.2 | 1.4 | 1.35 |
| 7 | 1.05 | 1.35 | 1.15 | 1.3 | .8 | 1.3 | (1.9) | 2.0 | 1.95 | 1.55 | 1.45 | 1.35 |
| 8 | 1.15 | 1.40 | 1.15 | 1.4 | 1.0 | 1.3 | (1.6) | 2.1 | 2.05 | 1.75 | 1.4 | 1.35 |
| 9 | .85 | 1.35 | 1.10 | 1.0 | 1.65 | 1.5 | (1.5) | 2.1 | 2.1 | 1.75 | 1.4 | 1.35 |
| 10 | .80 | 1.30 | 1.10 | .75 | 1.65 | 1.25 | (1.4) | 2.1 | 2.15 | 1.75 | 1.4 | 1.4 |
| 11 | .75 | 1.30 | 1.10 | .75 | 1.55 | 1.25 | (1.6) | 2.1 | 2.15 | 1.75 | 1.5 | 1.4 |
| 12 | .65 | 1.30 | 1.10 | .75 | 1.35 | 1.3 | (1.7) | 2.1 | .8 | 1.75 | 1.55 | 1.45 |
| 13 | .95 | 1.30 | 1.10 | .75 | 1.1 | 1.2 | 1.9 | 2.1 | .8 | 1.7 | 1.55 | 1.5 |
| 14 | 1.30 | 1.30 | 1.10 | .75 | 1.15 | 1.05 | 1.8 | 2.1 | .9 | 1.7 | 1.6 | 1.55 |
| 15 | 1.45 | 1.35 | 1.00 | .75 | 1.4 | .95 | 2.0 | 1.95 | .9 | 1.7 | 1.4 | 1.55 |
| 16 | 1.45 | 1.45 | 1.00 | .75 | 1.8 | .9 | (2.2) | 2.0 | .9 | 1.7 | 1.25 | 1.55 |
| 17 | 1.45 | 1.45 | .95 | .75 | 1.6 | 1.05 | 2.45 | 1.95 | 1.4 | 1.7 | 1.2 | 1.55 |
| 18 | 1.45 | 1.35 | .95 | 1.0 | 1.75 | 1.0 | 2.5 | 1.85 | 1.7 | 1.8 | 1.2 | 1.3 |
| 19 | 1.45 | 1.30 | .90 | 1.4 | 1.75 | 1.05 | 2.2 | 1.85 | 1.65 | 1.85 | 1.3 | .95 |
| 20 | 1.50 | 1.30 | .90 | 1.55 | 1.65 | 1.45 | 2.45 | 1.8 | 1.6 | 1.45 | 1.2 | 1.0 |
| 21 | 1.50 | 1.30 | .90 | (1.4) | 1.5 | 1.5 | 2.35 | 1.75 | 1.55 | 1.0 | 1.25 | 1.05 |
| 22 | 1.50 | 1.30 | .90 | (1.3) | 1.45 | 1.4 | 2.2 | 1.75 | 1.5 | 1.0 | 1.2 | 1.0 |
| 23 | 1.45 | 1.30 | .85 | (1.2) | 1.55 | 1.25 | (2.0) | 1.7 | 1.5 | 1.0 | 1.2 | 1.0 |
| 24 | 1.35 | 1.30 | .80 | (1.0) | 1.8 | 1.3 | 1.45 | 1.75 | 1.75 | .75 | 1.2 | .9 |
| 25 | 1.25 | 1.30 | .80 | (.9) | 1.65 | 1.55 | 1.45 | (1.7) | 1.95 | .75 | 1.2 | .95 |
| 26 | 1.15 | 1.30 | .65 | .85 | 1.05 | 1.55 | 1.2 | (1.65) | 1.85 | .75 | 1.2 | 1.0 |
| 27 | 1.05 | 1.30 | .60 | 1.0 | .9 | 1.75 | 1.1 | (1.6) | 1.8 | .75 | 1.2 | 1.0 |
| 28 | 1.00 | 1.30 | .75 | 1.0 | .9 | 1.55 | 1.1 | (1.55) | 1.8 | 1.05 | 1.1 | .9 |
| 29 | 1.00 | 1.25 | (.75) | .7 | ...... | 1.15 | 1.1 | 1.5 | 1.75 | 1.25 | 1.1 | .95 |
| 30 | 1.05 | 1.20 | (.75) | .6 | ...... | 1.5 | 1.1 | 1.55 | 1.75 | 1.25 | 1.05 | .95 |
| 31 | 1.05 | ...... | (.75) | .55 | ...... | 1.9 | ...... | 1.6 | ...... | 1.25 | 1.0 | ...... |

NOTE.—Gage heights in parentheses are estimated.

| Day. | Oct. | Nov. | Dec. |
|---|---|---|---|
| 1905. | | | |
| 1 | 1.0 | 1.1 | 1.0 |
| 2 | 1.1 | 1.15 | 1.0 |
| 3 | 1.1 | 1.25 | 2.0 |
| 4 | 1.15 | 1.1 | 1.5 |
| 5 | 1.2 | .95 | 1.5 |
| 6 | 1.3 | .9 | 1.7 |
| 7 | 1.45 | .9 | 1.65 |
| 8 | 1.45 | .9 | 1.6 |
| 9 | 1.4 | .95 | 1.55 |
| 10 | 1.35 | 1.0 | 1.6 |
| 11 | 1.4 | 1.05 | ...... |
| 12 | 1.35 | 1.1 | ...... |
| 13 | 1.5 | 1.05 | ...... |
| 14 | 1.0 | .95 | ...... |
| 15 | 1.15 | .75 | ...... |
| 16 | 1.25 | .8 | ...... |
| 17 | 1.1 | .8 | ...... |
| 18 | 1.0 | .85 | ...... |
| 19 | 1.05 | .8 | ...... |
| 20 | 1.1 | .7 | ...... |
| 21 | 1.0 | 0.8 | ...... |
| 22 | 1.0 | .9 | ...... |
| 23 | 1.2 | .85 | ...... |
| 24 | 1.15 | .75 | ...... |
| 25 | 1.05 | .75 | ...... |
| 26 | 1.05 | .75 | ...... |
| 27 | 1.1 | .75 | ...... |
| 28 | 1.1 | .85 | ...... |
| 29 | 1.2 | .95 | ...... |
| 30 | .9 | 1.3 | ...... |
| 31 | .85 | ...... | ...... |

[illegible] for 1905.

[illegible]

*Daily gage height, in feet, of Alamo channel near Calexico, Cal., for 1904.*

| Day. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Day. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ...... | 1.80 | (3.90) | 3.75 | 2.95 | 2.10 | 16 | ...... | 3.75 | (2.90) | 3.45 | (2.40) | (2.55) |
| 2 | ...... | 1.65 | (3.90) | 3.35 | 2.95 | 2.15 | 17 | ...... | 3.80 | (2.90) | 3.40 | (2.40) | (2.55) |
| 3 | ...... | 1.65 | 4.00 | 3.00 | 2.95 | 2.15 | 18 | ...... | 3.80 | 2.90 | 3.50 | 2.40 | (2.50) |
| 4 | ...... | 1.60 | 4.00 | (2.70) | 3.00 | 2.20 | 19 | ...... | 3.80 | 2.90 | 3.75 | 2.40 | (2.50) |
| 5 | ...... | 1.60 | 4.00 | 2.65 | 2.70 | 2.30 | 20 | ...... | 3.80 | 2.90 | 3.80 | 3.40 | (2.40) |
| 6 | ...... | 1.80 | 4.00 | 3.55 | 2.50 | 2.35 | 21 | ...... | 3.80 | 2.80 | 3.85 | 2.35 | (2.35) |
| 7 | ...... | 2.50 | 4.00 | 2.75 | 2.50 | 2.55 | 22 | 3.25 | 3.80 | 2.70 | 3.80 | 2.30 | 2.30 |
| 8 | ...... | 2.65 | 4.00 | 3.25 | (3.00) | 2.55 | 23 | 2.80 | 3.65 | 2.75 | 3.70 | 2.25 | 2.15 |
| 9 | ...... | 2.85 | 4.00 | 3.50 | (3.00) | 2.55 | 24 | 2.90 | 3.65 | 2.75 | 3.25 | 2.25 | 2.00 |
| 10 | ...... | 3.40 | 4.00 | 3.45 | (3.00) | 2.60 | 25 | 2.95 | 3.70 | 2.80 | 3.20 | 2.20 | (2.00) |
| 11 | ...... | 3.60 | 4.00 | 3.40 | 3.00 | 2.60 | 26 | 3.10 | 3.70 | 2.75 | 3.25 | 2.25 | (2.00) |
| 12 | ...... | 3.60 | 3.95 | 3.40 | 2.75 | 2.60 | 27 | 3.30 | 3.80 | 2.80 | 3.15 | 2.25 | (1.90) |
| 13 | ...... | 3.50 | 3.65 | 3.40 | 2.50 | 2.60 | 28 | 3.40 | 3.80 | 2.75 | 3.05 | 2.20 | (1.80) |
| 14 | ...... | 3.65 | 3.35 | 3.35 | (2.40) | 2.55 | 29 | 3.50 | 3.80 | 2.95 | 3.00 | 2.15 | 1.75 |
| 15 | ...... | 3.65 | (3.00) | 3.40 | (2.40) | 2.55 | 30 | 3.60 | 3.80 | 3.40 | 3.00 | 2.10 | (1.75) |
| | | | | | | | 31 | 3.80 | 3.80 | ...... | 2.95 | ...... | (1.75) |

NOTE.—Gage heights in parentheses are estimated.

*Discharge measurements of New River near Calexico, Cal., in 1904–5.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| Oct. 12 | S. M. Smith | ........ | 154 | Apr. 6 | R. R. McCoslin | 6.95 | 1,307 |
| Nov. 2 | Hardy and Smith | ........ | 52 | 12 | .....do | 6.50 | 949 |
| 10 | S. M. Smith | ........ | 28 | 18 | .....do | 6.80 | 1,149 |
| 17 | W. V. Hardy | ........ | 24 | 25 | .....do | 8.71 | 3,052 |
| 23 | .....do | ........ | 20 | May 2 | .....do | 8.47 | 2,417 |
| Dec. 1 | .....do | ........ | 18.6 | 9 | .....do | 8.80 | 2,890 |
| 7 | .....do | ........ | 16.7 | 16 | .....do | 9.19 | 3,237 |
| 14 | .....do | ........ | 22 | 23 | .....do | 9.24 | 3,097 |
| 21 | .....do | ........ | 10.2 | 30 | .....do | 9.38 | 3,400 |
| | | | | June 6 | .....do | 9.77 | 3,817 |
| 1905. | | | | 13 | .....do | 10.85 | 4,958 |
| Jan. 5 | W. V. Hardy | 2.00 | 12 | 20 | .....do | 11.81 | 5,949 |
| 13 | .....do | 3.20 | 82 | 27 | .....do | 12.70 | 10,810 |
| 20 | .....do | 3.30 | 99 | July 5 | .....do | 13.21 | 11,940 |
| 27 | .....do | 5.20 | 323 | 12 | .....do | 13.34 | 13,640 |
| Feb. 3 | .....do | 4.00 | 126 | 18 | Hardy and McCoslin | 13.11 | 13,220 |
| 10 | .....do | 5.70 | 451 | 25 | .....do | 12.42 | 10,040 |
| 18 | .....do | 6.90 | 986 | Aug. 1 | R. R. McCoslin | 11.38 | 8,221 |
| 23 | R. R. McCoslin | 7.14 | 1,063 | 8 | McCoslin and Hardy | 10.72 | 6,531 |
| Mar. 2 | .....do | 7.48 | 1,461 | 15 | .....do | 10.90 | 6,997 |
| 9 | .....do | 7.90 | 1,702 | 22 | .....do | 10.22 | 5,529 |
| 16 | .....do | 7.77 | 1,648 | 29 | M. V. Hardy | 9.42 | 4,308 |
| 23 | .....do | 6.74 | 1,159 | Sept. 5 | Hardy and McCoslin | 9.31 | 3,830 |
| 29 | .....do | 8.93 | 2,916 | 12 | .....do | 7.52 | 1,892 |

*Waste measurements in Imperial Valley in 1904.*

| Date. | Hydrographer. | Stream. | Location. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Oct. 10 | Hardy and Smith | New River | Brawley, Cal | 2[illegible] |
| 11 | ....do | Alamo channel | Rockwood, Cal | 4[illegible] |
| | | Canal No. 5 | Bernice, Cal | (a) |
| 18 | S. M. Smith | New River | Brawley, Cal | [illegible] |
| 18 | ....do | Alamo channel | Rockwood, Cal | 45 |
| 19 | ....do | Canal No. 5 | Bernice, Cal | 77 |
| | | Total waste | | 302 |
| 31 | Hardy and Smith | New River | Brawley, Cal | [illegible]1 |
| Nov. 1 | ....do | Alamo channel | Rockwood, Cal | 59 |
| 1 | ....do | Canal No. 5 | Bernice, Cal | 55 |
| | | Total waste | | 498 |
| 9 | W. V. Hardy | New River | Brawley, Cal | 315 |
| 9 | ....do | Alamo channel | Rockwood, Cal | 49 |
| 9 | ....do | Canal No. 5 | Bernice, Cal | 0 |
| | | Total waste | | 367 |
| 16 | ....do | New River | Brawley, Cal | 270 |
| 15 | ....do | Alamo channel | Rockwood, Cal | 117 |
| 15 | ....do | Canal No. 5 | Bernice, Cal | 1 |
| | | Total waste | | 388 |
| 24 | ....do | New River | Brawley, Cal | 311 |
| 22 | ....do | Alamo channel | Rockwood, Cal | 81 |
| 22 | ....do | Canal No. 5 | Bernice, Cal | 3 |
| | | Total waste | | 395 |
| 30 | ....do | New River | Brawley, Cal | 231 |
| 30 | ....do | Alamo channel | Rockwood, Cal | 73 |
| 30 | ....do | Canal No. 5 | Bernice, Cal | 0 |
| | | Total waste | | 304 |
| Dec. 6 | ....do | New River | Brawley, Cal | 257 |
| 6 | ....do | Alamo channel | Rockwood, Cal | 46 |
| 6 | ....do | Canal No. 5 | Bernice, Cal | 0 |
| | | Total waste | | 303 |
| 13 | ....do | New River | Brawley, Cal | 301 |
| 13 | ....do | Alamo channel | Rockwood, Cal | 52 |
| 13 | ....do | Canal No. 5 | Bernice, Cal | 0 |
| | | Total waste | | 353 |
| 24 | ....do | New River | Brawley, Cal | 254 |
| 24 | ....do | Alamo channel | Rockwood, Cal | 39 |
| 24 | ....do | Canal No. 5 | Bernice, Cal | 0 |
| | | Total waste | | 293 |

a No measurement made.

*Discharge measurements of Alamitos canal near Calexico, Cal., in 1904-5.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-ft.* |
| July 14 | W. V. Hardy | 1.40 | 26.6 |
| 23 | do | 1.48 | 24.3 |
| 26 | do | 1.30 | 18.4 |
| 29 | do | 1.50 | 26.3 |
| Aug. 2 | do | 1.08 | 8.2 |
| 5 | do | 1.04 | 13.3 |
| 10 | do | .81 | 3.0 |
| 17 | do | 1.20 | 17.7 |
| 23 | do | 1.17 | 17.4 |
| 26 | do | 1.13 | 15.6 |
| Sept. 3 | do | 1.10 | 16.3 |
| 10 | do | 1.15 | 21.0 |
| 18 | do | 1.39 | 31.0 |
| 24 | S. M. Smith | .87 | 8.3 |
| 27 | do | 1.02 | 13.7 |
| Oct. 1 | do | 1.10 | 8.4 |
| 5 | do | 1.19 | 18.7 |
| 8 | do | 1.54 | 36.0 |
| 15 | do | 1.50 | 35.0 |
| 22 | do | 1.30 | 26.0 |
| 29 | do | 1.24 | 25.0 |
| Nov. 4 | do | 1.21 | 23.0 |
| 11 | Smith and Hardy | 1.37 | 30.0 |
| 18 | W. V. Hardy | 1.48 | 35.0 |
| 25 | do | 1.48 | 26.0 |
| Dec. 2 | do | 1.34 | 22.0 |
| 8 | do | 1.41 | 25.0 |
| 15 | do | 1.43 | 26.0 |
| 22 | do | 1.46 | 29.0 |
| 1905. | | | |
| Jan. 3 | W. V. Hardy | 1.48 | 30 |
| 11 | do | 1.54 | 39 |
| 18 | do | 1.11 | 15.1 |
| 26 | do | 1.05 | 12.9 |
| Feb. 2 | do | 1.06 | 13.6 |
| 9 | do | .52 | 1.0 |
| 17 | R. R. McCoslin | 1.05 | 16.8 |
| 24 | do | 1.00 | 15.7 |
| 1905. | | *Feet.* | *Sec.-ft.* |
| Mar. 1 | R. R. McCoslin | 0.82 | 9.1 |
| 8 | do | | 0 |
| 15 | do | | 0 |
| 22 | do | | 0 |
| 29 | do | 1.20 | 24 |
| Apr. 5 | do | 1.53 | 44 |
| 11 | do | 1.63 | 50 |
| 17 | do | 1.67 | 57 |
| 24 | do | 1.39 | 40 |
| May 1 | do | 1.10 | 26 |
| 8 | do | 1.15 | 28 |
| 15 | do | 1.41 | 39 |
| 22 | do | 1.34 | 35 |
| 29 | do | 1.37 | 36 |
| June 5 | do | 1.35 | 36 |
| 12 | do | 1.32 | 37 |
| 18 | W. V. Hardy | 1.30 | 30 |
| 26 | R. R. McCoslin | 1.35 | 36 |
| July 5 | do | 1.33 | 34 |
| 10 | do | 1.34 | 33 |
| 17 | do | 1.35 | 34 |
| 24 | do | 1.34 | 33 |
| 31 | do | 1.34 | 33 |
| Aug. 7 | do | 1.12 | 22 |
| 14 | do | 1.12 | 22 |
| 21 | do | 1.17 | 24 |
| 28 | do | 1.27 | 31 |
| Sept. 4 | do | 1.34 | 39 |
| 11 | W. V. Hardy | 1.42 | 43 |
| 25 | do | 1.23 | 36 |
| Oct. 9 | do | 1.30 | 40 |
| 16 | do | 1.32 | 45 |
| 23 | do | 1.27 | 38 |
| Nov. 13 | do | | 0 |
| 18 | do | | 0 |
| 30 | do | .42 | 5.4 |
| Oct. 30 | do | .90 | 18.3 |
| Nov. 6 | do | | 0 |

*Daily gage height, in feet, of Alamitos canal near Calexico, Cal., for 1904-5.*

| Day. | July. | Aug. | Sept. |
|---|---|---|---|
| 1904. | | | |
| 1 | | 1.00 | (1.10) |
| 2 | | 1.10 | (1.10) |
| 3 | | 1.10 | 1.10 |
| 4 | | 1.05 | 1.05 |
| 5 | | 1.05 | 1.10 |
| 6 | | 1.00 | 1.10 |
| 7 | | 1.00 | (1.10) |
| 8 | | .90 | 1.15 |
| 9 | | 1.00 | 1.15 |
| 10 | | .80 | 1.15 |
| 11 | | .90 | 1.15 |
| 12 | | .85 | 1.20 |
| 13 | | .95 | 1.15 |
| 14 | | 1.00 | 1.15 |
| 15 | | 1.10 | 1.10 |
| 16 | | 1.15 | 1.15 |
| 17 | | 1.20 | 1.25 |
| 18 | | 1.20 | 1.40 |
| 19 | | 1.20 | 1.30 |
| 20 | | (1.20) | 1.25 |
| 21 | | 1.15 | 1.15 |
| 22 | 1.40 | (1.10) | 1.10 |
| 23 | 1.50 | 1.10 | 1.00 |
| 24 | 1.40 | (1.05) | .95 |
| 25 | 1.35 | (1.05) | 1.10 |
| 26 | 1.30 | 1.05 | 1.05 |
| 27 | 1.35 | 1.05 | 1.05 |
| 28 | 1.40 | (1.05) | 1.10 |
| 29 | 1.50 | (1.05) | 1.15 |
| 30 | 1.50 | (1.00) | 1.00 |
| 31 | 1.65 | (1.00) | |

*Daily gage height, in feet, of Alamitos canal near Calexico, Cal., for 1904–5*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 1 | 1.10 | 1.25 | 1.35 | 1.5 | 1.2 | 0.8 | 1.35 (?) | 1.1 | 1.35 | 1.3 | 1.05 | 1.4 |
| 2 | .65 | 1.25 | 1.35 | 1.5 | 1.1 | .8 | 1.5 | 1.1 | 1.35 | 1.3 | .9 | 1.4 |
| 3 | .90 | 1.25 | 1.35 | 1.5 | 1.25 | .6 | 1.6 | 1.1 | 1.35 | 1.35 | 1.05 | 1.35 |
| 4 | 1.15 | 1.25 | 1.35 | 1.45 | 1.1 | .4 | 1.55 | 1.1 | 1.35 | 1.35 | 1.1 | 1.35 |
| 5 | 1.25 | 1.30 | 1.35 | 1.45 | .95 | .35 | 1.5 | 1.1 | 1.35 | 1.35 | 1.1 | 1.3 (?) |
| 6 | 1.30 | 1.35 | 1.40 | 1.4 | .95 | .35 | 1.55 | 1.1 | 1.35 | 1.35 | 1.1 | 1.35 |
| 7 | 1.40 | 1.25 | 1.40 | 1.45 | .95 | .3 | 1.6 | 1.1 | 1.35 | 1.35 | 1.1 | 1.45 |
| 8 | 1.45 | 1.20 | 1.40 | 1.5 | .9 | .1 | 1.6 | 1.15 | 1.35 | 1.35 | 1.1 | 1.45 |
| 9 | 1.35 | 1.25 | 1.50 | 1.6 | .7 | .1 | 1.6 | 1.2 | 1.3 | 1.35 | 1.15 | 1.4 |
| 10 | 1.35 | 1.30 | 1.60 | 1.6 | .5 | .1 | 1.65 | 1.25 | 1.35 | 1.35 | 1.15 | 1.4 |
| 11 | 1.35 | 1.35 | 1.45 | 1.6 | .5 | .1 | 1.65 | 1.3 | 1.3 | 1.35 | 1.15 | 1.4 |
| 12 | 1.35 | 1.45 | 1.40 | 1.6 | .5 | .1 | 1.65 | 1.4 | 1.3 | 1.35 | 1.15 | 1.45 |
| 13 | 1.40 | 1.45 | 1.45 | 1.6 | .5 | .1 | 1.65 | 1.4 | 1.3 | 1.35 | 1.15 | 1.5 (?) |
| 14 | 1.45 | 1.45 | 1.45 | 1.7 | .55 (?) | .1 | 1.65 | 1.4 | 1.35 | 1.35 | 1.1 | 1.45 |
| 15 | 1.50 | 1.45 | 1.45 | 1.45 | .55 | .0 | 1.65 | 1.4 | 1.35 | 1.35 | 1.1 | 1.4 |
| 16 | 1.55 | 1.45 | 1.45 | 1.5 | .65 | .0 | 1.65 | 1.3 | 1.35 | 1.35 | 1.1 | 1.4 |
| 17 | 1.10 | 1.45 | 1.45 | 1.15 | 1.05 | .0 | 1.65 | 1.2 | 1.3 | 1.35 | 1.1 | 1.4 |
| 18 | .90 | 1.50 | 1.45 | 1.1 | 1.05 | .0 | 1.7 | 1.2 | 1.3 | 1.35 | 1.1 | 1.4 |
| 19 | .80 | 1.45 | 1.45 | 1.1 | 1.05 | .0 | 1.75 | 1.2 | 1.3 | 1.35 | 1.15 | 1.35 |
| 20 | 1.15 | (a) | 1.50 | 1.1 | 1.05 | .0 | 1.35 | 1.25 | 1.3 | 1.35 | 1.2 | 1.4 |
| 21 | 1.35 | (a) | 1.50 | 1.05 | 1.05 | .0 | 1.4 | 1.35 | 1.3 | 1.35 | 1.2 | 1.45 |
| 22 | 1.30 | 1.35 | 1.45 | 1.1 | 1.05 | .0 | 1.55 | 1.35 | 1.3 | 1.35 | 1.15 | 1.45 |
| 23 | 1.30 | 1.40 | 1.40 | 1.1 | 1.0 | .15 | 1.45 | 1.35 | 1.3 | 1.35 | 1.2 | 1.4 |
| 24 | 1.25 | 1.40 | 1.35 | 1.1 | 1.0 | .65 | 1.4 | 1.35 | 1.3 | 1.35 | 1.25 | 1.2 |
| 25 | 1.25 | 1.40 | 1.25 | 1.0 | 1.05 | .7 | 1.4 | 1.35 | 1.35 | 1.35 | 1.25 | 1.25 |
| 26 | 1.25 | 1.40 | 1.20 | 1.05 | 1.1 | .7 | 1.4 | 1.35 | 1.35 | 1.35 | 1.25 | 1.25 |
| 27 | 1.25 | 1.40 | 1.30 | 1.15 | .8 | .85 | 1.4 | 1.35 | 1.35 | 1.35 | 1.3 | 1.2 |
| 28 | 1.25 | 1.40 | 1.40 | 1.2 | .75 | .9 | 1.25 | 1.35 | 1.35 | 1.35 | 1.3 | 1.1 |
| 29 | 1.25 | 1.40 | (1.40) | 1.2 | ...... | 1.3 | 1.15 | 1.35 | 1.35 | 1.35 | 1.3 | 1.15 |
| 30 | 1.25 | 1.40 | (1.40) | 1.2 | ...... | 1.4 | 1.15 | 1.35 | 1.3 | 1.35 | 1.25 | 1.1 (?) |
| 31 | 1.25 | ...... | (1.40) | 1.25 | ...... | 1.3 | ...... | 1.35 | ...... | 1.35 | 1.3 | ...... |

NOTE.—Gage heights in parentheses are estimated.

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | 1905. | | | | 1905. | | | |
| 1 | 1.1 | 0.45 | 0.2 | 11 | 1.25 | 0.25 | 0.2 | 21 | 1.2 | 0.15 | ... |
| 2 | 1.25 | .45 | .25 | 12 | 1.25 | .3 | .25 | 22 | 1.15 | .15 | ... |
| 3 | 1.15 | .2 | .25 | 13 | 1.25 | .3 | ...... | 23 | 1.25 | .15 | ..... |
| 4 | 1.3 | .1 | .2 | 14 | 1.3 | .25 | ...... | 24 | 1.25 | .2 | |
| 5 | 1.3 | .0 | .2 | 15 | 1.3 | .3 | ...... | 25 | 1.2 | .25 | ... |
| 6 | 1.3 | .15 | .2 | 16 | 1.35 | .3 | ...... | 26 | 1.2 | .25 | . |
| 7 | 1.25 | .25 | .2 | 17 | 1.35 | .25 | ...... | 27 | 1.15 | .35 | .... |
| 8 | 1.25 | .3 | .2 | 18 | 1.35 | .2 | ...... | 28 | 1.15 | .4 | .... |
| 9 | 1.25 | .3 | .2 | 19 | 1.25 | .2 | ...... | 29 | 1.15 | .35 | . |
| 10 | 1.25 | .3 | .2 | 20 | 1.2 | .2 | ...... | 30 | .9 | .25 | .. |
| | | | | | | | | 31 | .8 | ...... | ... |

a Dry.

*Monthly discharge of Alamitos canal near Calexico, Cal., for 1905.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| January | 50 | 11 | 26.6 | 1,636 |
| February | 23 | .5 | 11.4 | 633 |
| March | 36 | 0 | 4.9 | 301 |
| April | 65 | 28 | 45.6 | 2,714 |
| May | 40 | 25 | 31.8 | 1,955 |
| June | 38 | 30 | 34.4 | 2,047 |
| July | 35 | 32 | 33.9 | 2,084 |
| August | 34 | 11 | 23.9 | 1,470 |
| September | 49 | 28 | 40.8 | 2,428 |
| October | 47 | 18 | 35.8 | 2,201 |
| November | 6 | 0 | 2.7 | 161 |
| The period | | | | 17,630 |

*Discharge measurements of Imperial canal (main) near Calexico, Cal., in 1904–5.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| July 14 | W. V. Hardy | 4.60 | 615 | Feb. 23 | R. R. McCoslin | 3.95 | 447 |
| 21 | do | 4.60 | 642 | Mar. 1 | do | 4.49 | 595 |
| 23 | do | 4.53 | 625 | 8 | do | | 0 |
| 26 | do | 4.32 | 598 | 15 | do | | 0 |
| 29 | do | 4.03 | 519 | 22 | do | 3.52 | 410 |
| Aug. 2 | do | 4.73 | 652 | 29 | do | 4.79 | 651 |
| 5 | do | 4.83 | 677 | Apr. 5 | do | 4.84 | 675 |
| 10 | do | 4.16 | 556 | 11 | do | 4.98 | 729 |
| 17 | do | 4.72 | 644 | 17 | do | 5.04 | 735 |
| 23 | do | 4.74 | 669 | 24 | do | 4.91 | 725 |
| 26 | do | 4.76 | 696 | May 1 | do | 4.47 | 648 |
| Sept. 3 | do | 4.93 | 717 | 8 | do | 4.42 | 623 |
| 10 | do | 4.91 | 682 | 15 | do | 4.34 | 586 |
| 18 | do | 4.62 | 662 | 22 | do | 4.24 | 562 |
| 24 | do | 4.27 | 573 | 29 | do | 4.32 | 595 |
| 27 | S. M. Smith | 4.10 | 560 | June 5 | do | 4.19 | 566 |
| Oct. 1 | do | 3.11 | 249 | 12 | do | 4.17 | 575 |
| 5 | do | 3.97 | 474 | 18 | do | 4.17 | 540 |
| 8 | do | 4.13 | 548 | 26 | do | 4.23 | 571 |
| 15 | do | 4.59 | 642 | July 3 | do | 4.25 | 572 |
| 22 | do | 4.70 | 639 | 10 | do | 4.38 | 567 |
| 29 | do | 4.63 | 656 | 17 | do | 4.36 | 582 |
| Nov. 4 | Smith and Hardy | 4.45 | 598 | 24 | do | 4.32 | 583 |
| 11 | do | 4.41 | 601 | 31 | do | 4.23 | 580 |
| 18 | W. V. Hardy | 4.62 | 620 | Aug. 7 | do | 4.29 | 556 |
| 25 | do | 4.54 | 602 | 14 | do | 4.33 | 562 |
| Dec. 2 | do | 4.48 | 586 | 21 | do | 4.33 | 540 |
| 8 | do | 4.45 | 573 | 28 | do | 4.29 | 536 |
| 15 | do | 4.42 | 561 | Sept. 4 | do | 4.30 | 558 |
| 22 | do | 4.40 | 563 | 11 | W. V. Hardy | | 0 |
| | | | | 25 | do | 4.27 | 551 |
| 1905. | | | | Oct. 2 | do | | 0 |
| Jan. 3 | W. V. Hardy | 3.90 | 439 | 9 | do | 4.29 | 559 |
| 11 | do | 4.20 | 524 | 16 | do | 4.30 | 546 |
| 18 | do | 4.50 | 567 | Nov. 3 | do | 2.90 | 298 |
| 26 | do | 4.20 | 510 | 6 | do | 3.60 | 380 |
| Feb. 2 | do | 4.18 | 507 | 13 | do | 3.60 | 380 |
| 15 | do | 4.09 | 485 | 18 | do | 3.55 | 378 |
| 17 | R. R. McCoslin | 4.15 | 472 | 30 | do | 3.50 | 376 |

*Daily gage height, in feet, of [illegible] creek [illegible] near [illegible] — Continued.*

| Day. | [illegible] | Aug. | Sept. | Day. | [illegible] | Aug. | Sept. | Day. | July. | Aug. | Sept. |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [illegible] | | | | [illegible] | | | | [illegible] | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [illegible] | | | | | | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [illegible] | | | | [illegible] | | | | [illegible] | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

a No flow.

[illegible] Gage heights in parentheses are estimated.

*Monthly discharge of main canal near Calexico, Cal., for 1905.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| January | 600 | 398 | 500 | 30,740 |
| February | 595 | 416 | 470 | 26,100 |
| March | 672 | 0 | 261 | 16,050 |
| April | 752 | 634 | 719 | 42,780 |
| May | 648 | 566 | 598 | 36,770 |
| June | 582 | 548 | 570 | 33,920 |
| July | 593 | 556 | 575 | 35,360 |
| August | 568 | 536 | 553 | 34,000 |
| September | 570 | 0 | 369 | 21,960 |
| October | 561 | 0 | 328 | 20,170 |
| November | 390 | 220 | 351 | 20,890 |
| The period | | | | 318,700 |

*Discharge measurements of Boundary canal near Calexico, Cal., 1904–5.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| July 23 | W. V. Hardy | 1.20 | 10.0 | Mar. 1 | R. R. McCoslin | 1.00 | 10.0 |
| 26 | .....do | 1.20 | 10.0 | 5 | .....do | ........ | 0 |
| 29 | .....do | 1.15 | 9.1 | 8 | .....do | ........ | 0 |
| Aug. 2 | .....do | 1.65 | 12.7 | 22 | .....do | .88 | 7.8 |
| 5 | .....do | 1.10 | 13.0 | 29 | .....do | .80 | 6.2 |
| 10 | .....do | 1.06 | 10.5 | Apr. 5 | .....do | .85 | 8.5 |
| 17 | .....do | .91 | 8.3 | 11 | .....do | .99 | 10.4 |
| 23 | .....do | .85 | 11.9 | 17 | .....do | 1.00 | 11.7 |
| 26 | .....do | 1.10 | 15.6 | 24 | .....do | 1.08 | 13.0 |
| Sept. 3 | Hardy and LaRue | 1.07 | 13.2 | May 1 | .....do | .83 | 6.1 |
| 10 | .....do | 1.08 | 12.9 | 8 | .....do | .83 | 7.5 |
| 18 | .....do | .85 | 7.5 | 15 | .....do | .74 | 6.1 |
| 24 | S. M. Smith | .99 | 11.0 | 22 | .....do | .71 | 5.1 |
| 27 | .....do | .90 | 9.9 | 29 | .....do | .85 | 8.0 |
| Oct. 1 | .....do | 1.00 | 10.8 | June 5 | .....do | .90 | 8.4 |
| 5 | .....do | 1.00 | 10.0 | 12 | .....do | .35 | .22 |
| 8 | .....do | 1.00 | 9.4 | 18 | .....do | 1.00 | 11.0 |
| 15 | .....do | .90 | 5.9 | 26 | .....do | .91 | 7.5 |
| 22 | .....do | .10 | 7.0 | July 3 | .....do | .93 | 6.4 |
| 29 | .....do | .10 | 7.0 | 10 | .....do | .78 | 4.8 |
| Nov. 4 | W. V. Hardy | .78 | 6.2 | 17 | .....do | .77 | 4.2 |
| 11 | Smith and Hardy | .85 | 6.6 | 24 | .....do | .96 | 6.6 |
| 18 | W. V. Hardy | .82 | 6.3 | 31 | .....do | .87 | 5.3 |
| 25 | .....do | .82 | 6.2 | Aug. 7 | .....do | .83 | 6.2 |
| Dec. 2 | .....do | .84 | 7.0 | 14 | .....do | .78 | 5.7 |
| 8 | .....do | .65 | 4.8 | 21 | .....do | .79 | 5.7 |
| 15 | .....do | .74 | 5.5 | 28 | .....do | .79 | 4.8 |
| 22 | .....do | .46 | 4.0 | Sept. 4 | .....do | .80 | 3.8 |
| 1905. | | | | 11 | .....do | ........ | 0 |
| Jan. 3 | .....do | .80 | 6.4 | Oct. 2 | W. V. Hardy | ........ | 0 |
| 11 | .....do | .98 | 8.6 | 6 | .....do | .90 | 8.4 |
| 18 | .....do | 1.00 | 8.9 | 9 | .....do | .87 | 5.3 |
| 25 | .....do | ........ | 7.8 | 16 | .....do | .80 | 5.0 |
| Feb. 2 | .....do | .99 | 9.1 | 18 | .....do | .25 | 0 |
| 9 | .....do | .95 | 8.3 | 30 | .....do | .85 | 8.0 |
| 17 | R. R. McCoslin | .79 | 5.3 | Nov. 13 | .....do | .90 | 8.4 |
| 23 | .....do | .98 | 8.3 | 18 | .....do | .95 | 7.0 |
| | | | | 30 | .....do | 1.03 | 12.7 |

*Monthly discharge of Boundary canal near Calexico, Cal., for 1905.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). |
|---|---|---|---|---|
| January | 8.9 | 6.0 | 8.1 | [illegible] |
| February | [illegible] | 7.1 | 7.8 | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] |
| April | 13.0 | 7.0 | 10.2 | [illegible] |
| May | 8.0 | 5.1 | [illegible] | [illegible] |
| June | 11.0 | [illegible] | 7.9 | [illegible] |
| July | [illegible] | 4.2 | 5.4 | [illegible] |
| August | 6.2 | 4.4 | [illegible] | [illegible] |
| September | 6.0 | 0 | [illegible] | [illegible] |
| October | 8.0 | 0 | 4.4 | [illegible] |
| November | 12.7 | 7.0 | [illegible] | [illegible] |
| The period |  |  |  | [illegible] |

*Discharge measurements of Wisteria canal near Calexico, Cal., in 1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
|  |  | *Feet.* | *Sec.-ft.* |  |  | *Feet.* | *Sec.-ft.* |
| Jan. [illegible] | W. V. Hardy | 1.12 | 3.0 | June 13 | R. R. McCoslin | 0.35 | [illegible] |
| 11 | do | .15 | 0 | 19 | W. V. Hardy | .57 | [illegible] |
| [illegible] | do | .52 | 7.7 | 26 | R. R. McCoslin | .28 | [illegible] |
| 25 | do | .32 | 22 | July 5 | do | .30 | [illegible] |
| Feb. [illegible] | do | .90 | 16.5 | 11 | do | .36 | [illegible] |
| 10 | do |  | 0 | 18 | do | .06 | [illegible] |
| [illegible] | do |  | 0 | 25 | W. V. Hardy |  | [illegible] |
| 25 | R. R. McCoslin |  | 0 | Aug. 1 | do | .23 | [illegible] |
| Mar. [illegible] | do |  | 0 | 8 | do |  | [illegible] |
| [illegible] | do |  | 0 | 15 | R. R. McCoslin |  | [illegible] |
| [illegible] | do |  | 0 | 22 | W. V. Hardy |  | [illegible] |
| [illegible] | do | .30 | 26 | 29 | R. R. McCoslin |  | [illegible] |
| Apr. [illegible] | do | 1.65 | 64 | Sept. 5 | W. V. Hardy |  | [illegible] |
| 12 | do | 1.29 | 47 | 12 | do |  | [illegible] |
| [illegible] | do | 1.00 | 33 | 26 | do |  | [illegible] |
| 25 | do | [illegible] | 32 | Oct. 3 | do |  | [illegible] |
| May 2 | do | .50 | 13.1 | 11 | do |  | [illegible] |
| [illegible] | do | .55 | 26 | 18 | do | .90 | [illegible] |
| [illegible] | do | .43 | 12.2 | 31 | do | .60 | [illegible] |
| 23 | do | [illegible] | 17.1 | Nov. 7 | do | .40 | [illegible] |
| [illegible] | do | .42 | 12.1 | 14 | do |  | [illegible] |
| June [illegible] | do | .38 | 11.9 | 21 | do | .15 | [illegible] |

*Daily gage height, in feet, of Wisteria canal near Calexico, Cal., for 1905.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.95 | 0.8 | 0.25 | 1.5 | 0.3 | 0.4 | 0.3 | 0.35 | 0 | 0.0 | 0.6 |
| 2 | .9 | .8 | .2 | 1.2 | .4 | .4 | .3 | .05 | 0 | .0 | .6 |
| 3 | 1.15 | .8 | .2 | 1.7 | .4 | .4 | .3 | .05 | 0 | .0 | .6 |
| 4 | 1.1 | 1.0 | .2 | 1.8 | .4 | .4 | .3 | .05 | 0 | .0 | .6 |
| 5 | 1.1 | .55 | .2 | 1.6 | .7 | .4 | .3 | .0 | 0 | .0 | .0 |
| 6 | 1.1 | .3 | .2 | 1.65 | .7 | .4 | .3 | .0 | 0 | .0 | .4 |
| 7 | 1.25 | .0 | .2 | 1.7 | .8 | .4 | .3 | .0 | 0 | .0 | .4 |
| 8 | 1.3 | .0 | .15 | 1.6 | .8 | .4 | .3 | .0 | 0 | .0 | .75 |
| 9 | .95 | .0 | .15 | 1.5 | .8 | .4 | .3 | .0 | 0 | .0 | .75 |
| 10 | .95 | .0 | .15 | 1.45 | .8 | .3 | .3 | .0 | 0 | .0 | .0 |
| 11 | .15 | .0 | .15 | 1.35 | .5 | .3 | .95 | .0 | 0 | .0 | .0 |
| 12 | .1 | .3 | .35 | 1.15 | .45 | .3 | 1.8 | .0 | 0 | .0 | .0 |
| 13 | .1 | .2 | .35 | 1.1 | .45 | .3 | 1.1 | .0 | 0 | .6 | .0 |
| 14 | .0 | .25 | .40 | .95 | .45 | .25 | 1.0 | .0 | 0 | .6 | .0 |
| 15 | .0 | .3 | .35 | 1.0 | .45 | .25 | 1.0 | .0 | 0 | .6 | .5 |
| 16 | .0 | .35 | .3 | 1.0 | .45 | .3 | .9 | .0 | 0 | .6 | .0 |
| 17 | .6 | .25 | .3 | 1.0 | .45 | .0 | .6 | .0 | 0 | .6 | .0 |
| 18 | .2 | .1 | .3 | 1.0 | .45 | .0 | .65 | .0 | 0 | .6 | .0 |
| 19 | .65 | .0 | .5 | .8 | .75 | .4 | .5 | .0 | 0 | .6 | .0 |
| 20 | .8 | .0 | .5 | .7 | .8 | .4 | .5 | .0 | 0 | .6 | .0 |
| 21 | .8 | .0 | .5 | .65 | .8 | .4 | .5 | .0 | 0 | .45 | .15 |
| 22 | .8 | .0 | .5 | 1.0 | .7 | .4 | .45 | .0 | 0 | .45 | .35 |
| 23 | .8 | .0 | .8 | .1 | .6 | .4 | .0 | .0 | 0 | .0 | .35 |
| 24 | .9 | .0 | .8 | .9 | .6 | .4 | .0 | .0 | 0 | .0 | .1 |
| 25 | .9 | .0 | .8 | 1.1 | .7 | .4 | .0 | .0 | 0 | .0 | .0 |
| 26 | 1.0 | .2 | .65 | 1.15 | .7 | .4 | .0 | .0 | 0 | .0 | .0 |
| 27 | 1.1 | .2 | .6 | .9 | .65 | .4 | .0 | .0 | 0 | .05 | .0 |
| 28 | 1.0 | .3 | .8 | .45 | .65 | .3 | .0 | .0 | 0 | .05 | .0 |
| 29 | 1.0 | ........ | .9 | .4 | .4 | .2 | .0 | .0 | 0 | .6 | .0 |
| 30 | 1.0 | ........ | 1.0 | .35 | .4 | .3 | .1 | .0 | 0 | .6 | .0 |
| 31 | .8 | ........ | 1.15 | ........ | .4 | ........ | .35 | .0 | 0 | .6 | ........ |

*Monthly discharge of Wisteria canal near Calexico, Cal., for 1905.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| January | 40 | 0 | 17.9 | 1,100 |
| February | 25 | 0 | 3.8 | 211 |
| March | 32 | 0 | 7.1 | 436 |
| April | 75 | 0 | 39.5 | 2,325 |
| May | 25 | 0 | 16.7 | 1,027 |
| June | 12 | 0 | 9.6 | 572 |
| July | 80 | 0 | 14.2 | 873 |
| August | 11 | 0 | .4 | 25 |
| September | 0 | 0 | .0 | 0 |
| October | 14 | 0 | 5.4 | 332 |
| November | 25 | 0 | 5.6 | 334 |
| The period | | | | 7,261 |

*Discharge measurements of Tamarack canal near Imperial, Cal., in 1905.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* | | | *Feet.* | *Sec.-ft.* |
| May 25 | W. V. Hardy | ........ | 52 | Oct. 19 | W. V. Hardy | ........ | [a] 40 |
| June 1 | R. R. McCoslin | 1.70 | 51 | 26 | do | ........ | [a] 40 |
| 8 | W. V. Hardy | 1.80 | 56 | Nov. 2 | do | ........ | [a] 40 |
| 14 | do | 1.64 | 43 | 9 | do | ........ | [a] 40 |
| 22 | do | 14.50 | 14 | 16 | do | ........ | [a] 40 |
| Oct. 4 | do | ........ | [a] 40 | 23 | do | ........ | [a] 30 |
| 12 | do | ........ | [a] 40 | | | | |

[a] Estimated.

*Daily gage height, in feet, of Tamarack canal near Imperial, Cal., for 1905.*

| Day. | June. | Day. | June. | Day. | June. |
|---|---|---|---|---|---|
| 1 | 1.7 | 11 | 1.95 | 21 | 1.5 |
| 2 | 1.68 | 12 | 2.05 | 22 | 1.45 |
| 3 | 1.7 | 13 | 1.35 | 23 | 1.35 |
| 4 | 1.55 | 14 | 1.65 | 24 | 1.2 |
| 5 | 1.65 | 15 | 1.65 | 25 | 1.2 |
| 6 | 1.75 | 16 | 1.6 | 26 | 1.05 |
| 7 | 1.8 | 17 | 1.65 | 27 | 1.0 |
| 8 | 1.8 | 18 | 1.7 | 28 | .9 |
| 9 | 1.8 | 19 | 1.65 | 29 | .9 |
| 10 | 1.9 | 20 | 1.75 | 30 | .7 |

*Monthly discharge of Tamarack canal near Imperial, Cal., for 1905.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| June | | | 34.3 | 2,041 |
| July | | | (40) | 2,460 |
| August | | | (40) | 2,460 |
| September | | | (40) | 2,380 |
| October | | | (40) | 2,460 |
| November | | | (40) | 2,380 |
| The period | | | | 14,180 |

NOTE.—Monthly means in parentheses estimated in the field.

*Total amount of water (in acre-feet) entering the Imperial Valley through irrigation canals at international boundary, January to November, 1905, inclusive.*

| Canal. | January. | February. | March. | April. | May. | June. |
|---|---|---|---|---|---|---|
| Hemlock | 263 | 555 | 658 | 1,149 | 965 | 839. |
| Boundary | 249 | 216.5 | 110.5 | 303.5 | 200 | 235.5 |
| Wisteria | 1,100 | 211 | 436 | 2,351 | 1,027 | 572 |
| Tamarack | | | | | | 2,041 |
| New Holt, or No. 7 | | | | | 1,107 | 1,964 |
| Main | 30,744 | 26,102 | 16,048 | 42,783 | 36,770 | 33,917 |
| Alamitos | 1,636 | 633 | 301 | 2,714 | 1,955 | 2,047 |
| Holt, or No. 5 Main | 1,525 | 1,162 | 3,530 | 12,377 | 9,346 | 8,926 |
| Alamo Channel | 5,500 | 8,330 | 9,223 | | | |
| Total | 41,017 | 37,209 | 30,306 | 61,677 | 51,370 | 50,541 |

| Canal. | July. | August. | September. | October. | November. | Total. |
|---|---|---|---|---|---|---|
| Hemlock | 670 | 639 | 482 | 461 | 274 | 6,955 |
| Boundary | 166 | 172 | 113.5 | 135.5 | 268 | 2,170 |
| Wisteria | 873 | 25 | 0 | 332 | 334 | 7,261 |
| Tamarack | 2,460 | 2,460 | 2,380 | 2,460 | 2,380 | 14,181 |
| New Holt, or No. 7 | 2,029 | 2,029 | 1,964 | 2,029 | 1,964 | 13,086 |
| Main | 35,355 | 34,003 | 21,957 | 20,168 | 20,886 | 318,733 |
| Alamitos | 2,084 | 1,470 | 2,428 | 2,201 | 161 | 17,630 |
| Holt, or No. 5 Main | 9,223 | 9,223 | 8,569 | 5,940 | 1,607 | 71,428 |
| Alamo Channel | | | | | | 23,053 |
| Total | 52,860 | 50,021 | 37,893 | 33,726 | 27,874 | 474,494 |

*Total amount of water (in acre-feet) entering Imperial Valley, including canals, New River, and Alamo channel; also amount of waste water discharging into Salton Sea and amount used for irrigation, January to November, 1905, inclusive.*

| Month. | Total discharge Imperial canal at headings below Yuma, Ariz. | Total discharge into Imperial Valley. | Total discharge (waste) into Salton Sea. | Total amount of water used for irrigation. |
|---|---|---|---|---|
| | *Acre-feet.* | *Acre-feet.* | *Acre-feet.* | *Acre-feet.* |
| January | 58,100 | 55,590 | 35,356 | 20,234 |
| February | 227,150 | 92,913 | 77,919 | 14,994 |
| March | 288,990 | 210,896 | 194,548 | 16,348 |
| April | 233,550 | 223,171 | 182,494 | 40,677 |
| May | 335,420 | 321,239 | 287,869 | 33,370 |
| June | 573,020 | 622,911 | 587,370 | 35,541 |
| July | 1,104,620 | 1,037,724 | 978,244 | 50,480 |
| August | 609,030 | 597,751 | 564,946 | 32,805 |
| September | 365,360 | [a] 353,360 | 324,869 | 28,491 |
| October | 468,840 | [a] 456,840 | 435,227 | 21,613 |
| November | 500,000 | [a] 488,000 | 477,977 | 10,023 |
| Total | 4,764,080 | 4,460,395 | 4,155,819 | 304,576 |

[a] Estimated.

Total amount of irrigated land (as per examination made in March and April, 1905) .........acres.. 79,591
Amount of water used per acre (in acre-feet) ..................... 3.83

## LANDS IRRIGATED IN THE IMPERIAL VALLEY.

In April, 1904, an examination was made to determine the amount of lands irrigated in the valley. The gross area under irrigation at that time was 66,741 acres. A second examination was made in September of the same year by W. V. Hardy, of the Reclamation Service, and showed the total area irrigated at that time to be 31,318 acres. Another examination by Mr. Hardy in March and April, 1905, gave a total irrigated area of 79,591 acres.

The examination of area of irrigated land made in March and April, 1905, is used in computing the amount of water per acre used during 1905. It is probable that this area was greatly reduced during the summer, as areas for the raising of hay and grain were not again used after the crops were harvested until the late fall months, when they were again seeded. Large areas of alfalfa and kafir corn were necessarily irrigated throughout the year.

## DUTY OF WATER IN THE IMPERIAL VALLEY.

During the fall of 1904 rating flumes were placed on two canals in Imperial Valley for the study of the duty of water. Two types of soil were selected for these investigations, one known as "hard soil" and classified as "Imperial loam" as shown on soil map of Bureau of Soils, United States Department of Agriculture. The other type is known as "soft soil" and classified as "Imperial sandy loam."

The location of the investigation on "Imperial loam" was at the ranch of W. W. McKim, 7 miles east of Imperial, being the west half of sec. 8, T. 15 S., R. 14 E.

The location of the investigation on "Imperial sandy loam" was on lands of the California-Mexico Land Co., 3½ miles east of Mexicala in Mexican territory and directly south of the California-Mexico boundary line in T. 17 S., R. 15 E.

Permanent flumes were constructed at the head of each of these canals and a sufficient number of measurements were made throughout the year for rating them. Self-recording registers were placed at each of these stations, and the mean daily gage height was computed from the register records.

During 1905 the Imperial Valley received a very unusual rainfall. The precipitation at Imperial was 10.06 inches for the year. At Calexico the precipitation was 9.33 inches for the year. The mean annual rainfall will probably not exceed 3 inches in normal years.

### CALIFORNIA-MEXICO LAND & CATTLE CO.'S FLUME.

This station was established November 28, 1904. It was located 3½ miles east of Mexicala. The total area irrigated under this flume was 575 acres. The soil is classified as "Imperial sandy loam." In December, 1904, the entire area was sown to barley, 75 acres were cut for hay, averaging 1¼ tons to the acre; the balance of the acreage was used for pasturage. The crop was equally as good over the entire area as that on the 75 acres which was cut for hay. In May, 1905, the entire area was sown to kafir corn. This crop was poor and scattering and used in the fall for pasturage. This area received an ample supply of water for the crops raised.

The rainfall for this station is taken from the United States Weather Bureau records kept at Calexico, Cal.

*Monthly duty of water under California-Mexico Land & Cattle Co.'s flume during 1905.*

| Month. | Acre-feet. | | Rainfall in inches. |
|---|---|---|---|
| | Total. | Per acre. | |
| January | 67.6 | 0.12 | 1.30 |
| February | 5.6 | .01 | 3.76 |
| March | 30.7 | .05 | .91 |
| April | 113.0 | .20 | .50 |
| May | 313.0 | .55 | .00 |
| June | 214.0 | .37 | .00 |
| July | 332.0 | .58 | .03 |
| August | 289.0 | .50 | .00 |
| September | 131.0 | .23 | .13 |
| October | 91.7 | 16 | .00 |
| November | 66.0 | .11 | 1.96 |
| December | 104.0 | .18 | .54 |
| Total irrigation | 1,757.6 | 3.06 | 9.33 |
| Total, including rainfall | | 3.84 | |

### McKIM FLUME.

This station was established on September 23, 1904. The amount of land irrigated under this flume was 380 acres. The soil is classified as "Imperial loam." The crops raised during 1905 consisted of 100

acres in barley, which was sown in October, 1904. The crop was only fair and was used for the pasturage of hogs. The balance of the area, 280 acres, had been previously planted to alfalfa, 100 acres having been sown in October, 1902, and 100 acres in October, 1903. This area in alfalfa was in fair condition at the time the station was established. The crop of 1905 was fair and used only for the pasturage of hogs. The supply of water furnished for this area was not enough for thorough irrigation. Water was taken from Alamo channel until March, 1905, and up to this time the supply was sufficient for thorough irrigation. After March, 1905, water was taken from Alamitos canal on account of flood conditions in the Alamo channel which destroyed the levee at point where the diversion was made. The water supply received from the Alamitos canal was not enough for the thorough irrigation of this area and crops suffered considerably from lack of water after March.

The rainfall for this station is taken from the United States Weather Bureau records kept at Imperial, Cal.

*Monthly duty of water under McKim flume during 1905.*

| Month. | Acre-feet. | | Rainfall in inches. |
|---|---|---|---|
| | Total. | Per acre. | |
| January | 24.6 | 0.06 | 1.50 |
| February | 16.7 | .04 | 6.12 |
| March | 12.3 | .03 | 1.05 |
| April | 114.0 | .30 | .15 |
| May | 85.6 | .22 | .00 |
| June | 108.0 | .28 | .00 |
| July | 79.4 | .21 | .07 |
| August | 61.0 | .16 | .00 |
| September | 71.9 | .19 | .04 |
| October | 49.2 | .13 | .00 |
| November | 17.9 | .05 | .83 |
| December | 49.2 | .13 | .30 |
| Total irrigation | 689.8 | 1.81 | 10.06 |
| Total, including rainfall | | 2.64 | |

MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made on streams and ditches in the lower Colorado River basin:

*Miscellaneous measurements in Colorado River drainage basin.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-feet.* |
| Aug. 18, 1875 | Colorado River | U. S. Engineers | Stones Ferry | 18,410 |
| Aug. 20, 1875 | .....do | .....do | Camp Mohave | 11,610 |
| Jan. 1, 1902 | Williams River | J. B. Lippincott | Mouth of river | 4 |
| Oct. 28, 1902 | .....do | E. T. Perkins | .....do | 4 |
| Nov. 14, 1902 | Imperial Canal | | International boundary | 374 |
| Dec. 14, 1902 | .....do | | .....do | 494 |
| Aug. 4, 1904 | .....do | W. D. Smith | Junction with Carter River, Mex. | 309 |
| Aug. 3, 1904 | Imperial Canal, main channel. | .....do | Below Bests' camp, Mex. | 525 |
| Do | Padrone River diversion. | ...do | .....do | 609 |

## SOUTH PACIFIC COAST STREAMS.

### TIA JUANA RIVER BASIN.

#### COTTONWOOD CREEK AND DULZURA CONDUIT NEAR JAMUL, CAL.

This station, which is located at the Barrett dam site, 1½ miles below the intake of the Dulzura conduit, in the SW. ¼ sec. 15, T. 17 S., R. 3 E., about 6 miles above the San Diego Campo road and about 12 miles east of Jamul, was established December 14, 1905.

Pine Valley Creek enters Cottonwood Creek 1 mile and Lyons Creek half a mile above the gaging station. The drainage area above the station, including that of Pine Valley Creek, is approximately 270 square miles.

The Southern California Mountain Water Co. diverts water from Pine Valley and Cottonwood creeks about half a mile above their junction by way of Dulzura conduit (13.4 miles long) and the headwaters of Dulzura Creek, whence it flows 12 miles to the lower Otay reservoir, which supplies water to the city of San Diego. The capacity of the canal is about 60 second-feet. The amount diverted is measured in the diversion flume about 1½ miles below the intake and one-fourth mile below the station of Cottonwood Creek. A staff gage is located at the measuring section in the flume.

Several gages with independent datums have been installed at this station. Two vertical staff gages are now used. The upper one is on the left bank near the end of the dam and reads the depth of the water on the crest of the dam. The lower gage is on the upstream side of the dam near the right bank, and its datum is 2.50 feet lower. The gage heights beginning 1909 are referred to the datum of the lower gage.

Discharge measurements to determine the excess water not diverted to the lower Otay reservoir are made at the low concrete dam, back of which sand and gravel have been deposited to the level of its crest. At low stages the flow is restricted to a rectangular wooden opening through the wall of the dam, but at high stages the flow is over the entire length of the dam, which is 61 feet. Measurements are usually made by wading, except at high stages, when only float velocities can be obtained.

The gage height records are furnished by the Southern California Mountain Water Co. The results obtained at this station are only fair.

*Discharge measurements of Cottonwood Creek near Jamul, Cal., in 1905–1910.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1905. | | *Feet.* | *Sec.-ft.* | 1907. | | *Feet.* | *Sec.-ft.* |
| Nov. 18 | W. B. Clapp | ........ | 0.5 | Mar. 20 | W. V. Hardy | 0.60 | 89 |
| Dec. 14 | C. H. Lee | 0.06 | 1.1 | Apr. 12 | .....do | .64 | 105 |
| | | | | 27 | .....do | .51 | 72 |
| 1906. | | | | 28 | .....do | .50 | 68 |
| Jan. 6 | W. V. Hardy | .10 | 3.5 | May 19 | .....do | .37 | 34 |
| 19 | .....do | .21 | 12.4 | 29 | Hardy and Hall | .41 | 46 |
| 19 | .....do | .30 | 32 | June 11 | Clapp and Hardy | .28 | 22 |
| 20 | .....do | .40 | 39 | 16 | N. L. Hall | ........ | 27 |
| 20 | .....do | .50 | 63 | 20 | .....do | 1.08 | 19 |
| 20 | .....do | .55 | 76 | 27 | W. V. Hardy | .89 | 14 |
| Feb. 3 | .....do | .05 | 4.1 | Dec. 6 | .....do | .72 | 11 |
| 14 | .....do | .23 | 15.5 | | | | |
| Mar. 11 | .....do | .12 | 13.2 | 1908. | | | |
| 12 | .....do | 1.21 | 383 | Jan. 17 | W. V. Hardy | .81 | 14 |
| 13 | Joe Hooker | 2.20 | 644 | 27 | .....do | 1.95 | 52 |
| 16 | .....do | .82 | 150 | Feb. 14 | .....do | 2.30 | 62 |
| 21 | .....do | .58 | 90 | 23 | .....do | 1.97 | 43 |
| 24 | .....do | 6.00 | 5,330 | Mar. 12 | .....do | 1.53 | 31 |
| 25 | .....do | 6.50 | 4,100 | 21 | .....do | 1.12 | 20 |
| 31 | .....do | 1.10 | 416 | Apr. 5 | .....do | .91 | 17 |
| Apr. 7 | .....do | .81 | 239 | May 12 | .....do | .73 | 11 |
| 19 | W. V. Hardy | .59 | 116 | Nov. 18 | .....do | ........ | 1.6 |
| May 8 | .....do | .40 | 76 | Dec. 22 | .....do | ........ | 4.3 |
| June 22 | C. H. Lee | .28 | 14.2 | | | | |
| Oct. 5 | W. F. Martin | ........ | 1.0 | 1909. | | | |
| Nov. 27 | W. V. Hardy | .90 | 32 | Feb. 24 | W. V. Hardy | 2.55 | 90 |
| Dec. 15 | .....do | 2.00 | 40 | Apr. 21 | Clapp and Hardy | .55 | 7.8 |
| | | | | May 27 | W. V. Hardy | ........ | .5 |
| 1907. | | | | | | | |
| Jan. 5 | W. V. Hardy | 2.25 | 56 | 1910. | | | |
| 15 | .....do | .60 | 171 | Jan. 24 | W. V. Hardy | .50 | 5.7 |
| Feb. 7 | .....do | .38 | 50 | Mar. 13 | .....do | .31 | 2.2 |
| 26 | .....do | .48 | 59 | June 5 | .....do | .10 | .4 |
| Mar. 8 | .....do | .80 | 191 | | | | |

NOTE.—The discharge measurements are referred to several gages at independent datums. At present two gages are used, one being read at low stages when the water flows through a 6-foot flume in the dam, and the other when the water flows over the crest of the dam. Some measurements were made with the 6-foot flume open and others with the flume closed. The difference between the gages is 2.5 feet.

*Daily gage height, in feet, of Cottonwood Creek near Jamul, Cal., for 1909–10.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | ........ | 1.4 | 1.9 | 2.8 | 0.5 | 0.25 | 0.2 | 0.0 | 0.7 |
| 2 | ........ | 1.0 | 1.7 | 2.75 | .4 | .25 | .2 | .0 | .45 |
| 3 | ........ | .6 | 1.8 | 2.7 | .4 | .25 | .15 | .0 | .4 |
| 4 | ........ | 1.45 | 1.2 | 2.6 | .4 | .25 | .15 | .0 | .35 |
| 5 | ........ | .55 | 1.1 | 2.6 | .4 | .25 | .15 | .0 | .35 |
| 6 | ........ | .6 | 1.0 | 2.5 | .35 | .25 | .15 | .65 | .55 |
| 7 | ........ | .6 | 1.8 | 2.3 | .3 | .25 | .15 | .3 | .5 |
| 8 | ........ | 2.9 | 1.3 | 2.05 | .4 | .25 | .15 | .15 | .35 |
| 9 | ........ | 2.4 | 1.2 | 1.8 | .3 | .2 | .15 | .15 | .3 |
| 10 | ........ | 1.8 | 1.1 | 1.7 | .35 | .2 | .15 | .15 | .2 |
| 11 | ........ | 1.7 | .7 | 1.65 | .35 | .2 | .15 | .0 | .2 |
| 12 | ........ | 2.8 | .6 | 1.5 | .35 | .25 | .15 | .0 | .15 |
| 13 | ........ | 3.05 | .5 | 1.35 | .35 | .2 | .15 | .0 | .15 |
| 14 | ........ | 2.8 | .4 | 1.2 | .3 | .2 | .15 | .1 | .1 |
| 15 | ........ | 2.8 | .4 | 1.0 | .3 | .2 | .1 | .1 | .1 |
| 16 | ........ | 2.5 | .45 | .85 | .3 | .2 | .1 | .45 | .1 |
| 17 | ........ | 2.3 | .5 | .7 | .3 | .2 | .1 | .3 | .1 |
| 18 | ........ | 2.1 | .4 | .6 | .3 | .2 | .06 | .25 | .1 |
| 19 | ........ | 1.5 | .4 | .6 | .3 | .2 | .08 | .7 | .1 |
| 20 | ........ | 1.2 | .4 | .6 | .3 | .2 | .0 | .4 | .1 |
| 21 | ........ | 3.1 | 2.0 | .6 | .3 | .2 | .0 | .2 | .1 |
| 22 | ........ | 2.8 | 3.2 | .6 | .3 | .2 | .0 | .15 | .1 |
| 23 | ........ | 2.6 | 2.9 | .5 | .3 | .2 | .0 | .1 | .15 |
| 24 | ........ | 2.6 | 2.7 | .5 | .3 | .2 | .05 | .1 | .2 |
| 25 | ........ | 2.4 | 2.65 | .4 | .3 | .2 | .05 | .1 | .2 |
| 26 | ........ | 2.3 | 2.7 | .4 | .3 | .2 | .05 | .0 | .2 |
| 27 | 2.8 | 2.1 | 3.5 | .4 | .3 | .2 | .2 | .55 | .2 |
| 28 | 2.8 | 2.0 | 3.55 | .35 | .3 | .2 | .2 | .25 | .15 |
| 29 | 2.4 | ........ | 3.45 | .65 | .3 | .15 | .1 | .1 | .15 |
| 30 | 2.1 | ........ | 3.25 | .65 | .25 | .5 | .0 | 1.0 | .15 |
| 31 | 1.7 | ........ | 3.2 | ........ | .25 | ........ | .0 | 1.2 | ........ |

*Daily gage height, in feet, of Cottonwood Creek near Jamul, Cal., in 1909-10*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | |
| 1 | 0.3 | 0.3 | 0.5 | 2.4 | 0.44 | 0.4 | 2.35 | 0.18 | 0.09 | [illegible] |
| 2 | .3 | .3 | .5 | 1.5 | .4 | .39 | 2.15 | .16 | .11 | .02 |
| 3 | .2 | .3 | .7 | 1.9 | .41 | .39 | 2.05 | .15 | .11 | .02 |
| 4 | .25 | .3 | .5 | 1.35 | .44 | .38 | 1.4 | .22 | .11 | .01 |
| 5 | .2 | .3 | 1.1 | 2.5 | .42 | .35 | .35 | .21 | .09 | ...... |
| 6 | .2 | .3 | .9 | 1.35 | .42 | .35 | .42 | .25 | .08 | ...... |
| 7 | .2 | .3 | .5 | 1.55 | .42 | .35 | .41 | .3 | .08 | ...... |
| 8 | .25 | .3 | .5 | 1.4 | .39 | .31 | .38 | .25 | .08 | ...... |
| 9 | .2 | .5 | 2.5 | 1.3 | .34 | .35 | .35 | .19 | .06 | ...... |
| 10 | .2 | .5 | 1.5 | 1.35 | .32 | .35 | .35 | .18 | .05 | ...... |
| 11 | .25 | .5 | .5 | 1.2 | .35 | .34 | .32 | .18 | .05 | ...... |
| 12 | .25 | .7 | .4 | 1.35 | .32 | .31 | .4 | .16 | .05 | ...... |
| 13 | .2 | .35 | .3 | .9 | .31 | .31 | .39 | .18 | .05 | ...... |
| 14 | .2 | .5 | .3 | 1.3 | .32 | .32 | .31 | .18 | .06 | ...... |
| 15 | .2 | 1.05 | .3 | 1.55 | .34 | .32 | .3 | .19 | .18 | ...... |
| 16 | .2 | .7 | .3 | 3.0 | .38 | .32 | .31 | .19 | .18 | ...... |
| 17 | .2 | .55 | .3 | 2.55 | .3 | .35 | .29 | .18 | .18 | ...... |
| 18 | .25 | .6 | .3 | 1.9 | .32 | .42 | .29 | .19 | .11 | ...... |
| 19 | .2 | .6 | .3 | 1.65 | .42 | .35 | .32 | .16 | .09 | ...... |
| 20 | .2 | .55 | .5 | 1.35 | 1.35 | .32 | .32 | .19 | .08 | ...... |
| 21 | .2 | .55 | 3.1 | .55 | .32 | .32 | .28 | .18 | .02 | ...... |
| 22 | .2 | .6 | 1.85 | .5 | .45 | .32 | .22 | .13 | .04 | ...... |
| 23 | .2 | .5 | .6 | .51 | .4 | .32 | .19 | .15 | .06 | ...... |
| 24 | .2 | .6 | .7 | .5 | .4 | .32 | .25 | .14 | .06 | ...... |
| 25 | .2 | .6 | .5 | .39 | .41 | .39 | .3 | .14 | .06 | ...... |
| 26 | .2 | 1.85 | .5 | .5 | .4 | .42 | .2 | .12 | .05 | ...... |
| 27 | .2 | 1.5 | .4 | .46 | .4 | .9 | .18 | .12 | .02 | ...... |
| 28 | .2 | .95 | .4 | .45 | .35 | 2.4 | .2 | .09 | .02 | ...... |
| 29 | .2 | .9 | .55 | .41 | ........ | 2.15 | .18 | .12 | .02 | ...... |
| 30 | .25 | .7 | .55 | .42 | ........ | 1.7 | .15 | .09 | .02 | ...... |
| 31 | .25 | ........ | .4 | .4 | ........ | 1.75 | ........ | .08 | ........ | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | 1910. | | | | 1910. | | | |
| 1 | | 0.22 | 1.29 | 11 | | 0.35 | 1.25 | 21 | 0.08 | 0.36 | [illegible] |
| 2 | | .26 | .39 | 12 | | .39 | .36 | 22 | .06 | .3 | [illegible] |
| 3 | | .35 | .29 | 13 | | .35 | .35 | 23 | .12 | .39 | .39 |
| 4 | | .45 | .28 | 14 | | .39 | .39 | 24 | .11 | .39 | [illegible] |
| 5 | | .35 | .31 | 15 | | .44 | .36 | 25 | .09 | .39 | [illegible] |
| 6 | | .39 | .31 | 16 | | .35 | .36 | 26 | .11 | .32 | [illegible] |
| 7 | | .39 | .39 | 17 | | .32 | .28 | 27 | .11 | .3 | [illegible] |
| 8 | | .39 | .39 | 18 | | .3 | .28 | 28 | .13 | .3 | [illegible] |
| 9 | | .39 | .39 | 19 | 0.12 | .39 | .29 | 29 | .14 | .3 | [illegible] |
| 10 | | .38 | .39 | 20 | .04 | .31 | .35 | 30 | [illegible] | [illegible] | [illegible] |
| | | | | | | | | 31 | .21 | ........ | [illegible] |

*Daily discharge, in second-feet, of Cottonwood Creek near Jamul, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 8 | 27 | 43 | 132 | 6.0 | 2.0 | 1.5 | ........ | 10 |
| 2 | 8 | 17 | 36 | 122 | 4.0 | 2.0 | 1.5 | ........ | 5.0 |
| 3 | 8 | 8.1 | 39 | 111 | 4.0 | 2.0 | 1.0 | ........ | 4.0 |
| 4 | 8 | 29 | 22 | 92 | 4.0 | 2.0 | 1.0 | ........ | 3.0 |
| 5 | 8 | 7.0 | 20 | 92 | 4.0 | 2.0 | 1.0 | ........ | 3.0 |
| 6 | 8 | 8.1 | 17 | 78 | 3.2 | 2.0 | 1.0 | 9.0 | 7.0 |
| 7 | 8 | 8.1 | 39 | 62 | 2.5 | 2.0 | 1.0 | 2.5 | 6.0 |
| 8 | 8 | 150 | 25 | 49 | 4.0 | 2.0 | 1.0 | 1.0 | 3.0 |
| 9 | 8 | 69 | 22 | 39 | 2.5 | 1.5 | 1.0 | 1.0 | 2.5 |
| 10 | 12 | 39 | 20 | 36 | 3.2 | 1.5 | 1.0 | 1.0 | 1.5 |
| 11 | 10 | 36 | 10 | 34 | 3.2 | 1.5 | 1.0 | ........ | 1.5 |
| 12 | 8 | 132 | 8.1 | 30 | 3.2 | 2.0 | 1.0 | ........ | 1.0 |
| 13 | 17 | 206 | 6.0 | 26 | 3.2 | 1.5 | 1.0 | ........ | 1.0 |
| 14 | 206 | 132 | 4.0 | 22 | 2.5 | 1.5 | 1.0 | .5 | .5 |
| 15 | 56 | 132 | 4.0 | 17 | 2.5 | 1.5 | .5 | .5 | .5 |
| 16 | 44 | 78 | 5.0 | 14 | 2.5 | 1.5 | .5 | 5.0 | .5 |
| 17 | 34 | 62 | 6.0 | 10 | 2.5 | 1.5 | .5 | 2.5 | .5 |
| 18 | 34 | 51 | 4.0 | 8.1 | 2.5 | 1.5 | .3 | 2.0 | .5 |
| 19 | 20 | 30 | 4.0 | 8.1 | 2.5 | 1.5 | .4 | 10 | .5 |
| 20 | 17 | 22 | 4.0 | 8.1 | 2.5 | 1.5 | ........ | 4.0 | .5 |
| 21 | 15 | 226 | 47 | 8.1 | 2.5 | 1.5 | ........ | 1.5 | .5 |
| 22 | 78 | 132 | 273 | 8.1 | 2.5 | 1.5 | ........ | 1.0 | .5 |
| 23 | 464 | 92 | 159 | 6.0 | 2.5 | 1.5 | ........ | .5 | 1.0 |
| 24 | 464 | 92 | 111 | 6.0 | 2.5 | 1.5 | .3 | .5 | 1.5 |
| 25 | 620 | 69 | 102 | 4.0 | 2.5 | 1.5 | .3 | .5 | 1.5 |
| 26 | 620 | 62 | 111 | 4.0 | 2.5 | 1.5 | .3 | ........ | 1.5 |
| 27 | 132 | 51 | 473 | 4.0 | 2.5 | 1.5 | 1.5 | 7.0 | 1.5 |
| 28 | 132 | 47 | 509 | 3.2 | 2.5 | 1.5 | 1.5 | 2.0 | 1.0 |
| 29 | 69 | ........ | 438 | 9.2 | 2.5 | 1.0 | .5 | .5 | 1.0 |
| 30 | 51 | ........ | 304 | 9.2 | 2.0 | 6.0 | ........ | 17 | 1.0 |
| 31 | 36 | ........ | 273 | ........ | 2.0 | ........ | ........ | 22 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | |
| 1 | 1.0 | 2.5 | 8.1 | 69 | 4.8 | 4.0 | 65 | 0.8 | 0.4 | 0.1 |
| 2 | 1.0 | 2.5 | 12 | 33 | 4.0 | 3.8 | 54 | .8 | .5 | .1 |
| 3 | 1.5 | 2.5 | 10 | 43 | 4.2 | 3.8 | 49 | .7 | .5 | .1 |
| 4 | 2.0 | 2.5 | 8.1 | 23.4 | 4.8 | 3.8 | 27.3 | 1.3 | .5 | ........ |
| 5 | 1.5 | 2.5 | 20 | 78 | 4.4 | 3.1 | 7.0 | 1.2 | .4 | ........ |
| 6 | 1.5 | 2.5 | 15 | 45 | 4.4 | 3.1 | 4.4 | 2.1 | .3 | ........ |
| 7 | 1.5 | 2.5 | 6.0 | 31.5 | 4.4 | 3.6 | 4.2 | 2.3 | .4 | ........ |
| 8 | 1.0 | 2.5 | 6.0 | 27.3 | 3.8 | 2.5 | 3.6 | 2.1 | .3 | ........ |
| 9 | .5 | 6.0 | 92 | 24.7 | 3.0 | 3.3 | 3.6 | 1.0 | .2 | ........ |
| 10 | .5 | 6.0 | 30 | 18.3 | 2.6 | 3.1 | 3.1 | 1.0 | .2 | ........ |
| 11 | 11 | 8.1 | 6.0 | 22.1 | 3.3 | 3.0 | 2.6 | 1.0 | .2 | ........ |
| 12 | 1.0 | 10 | 4.0 | 23.4 | 2.6 | 2.5 | 4.0 | .8 | .2 | ........ |
| 13 | .5 | 9.2 | 2.5 | 14.7 | 2.5 | 2.5 | 3.8 | 1.0 | .2 | ........ |
| 14 | .5 | 12 | 2.5 | 24.7 | 2.6 | 2.6 | 2.5 | 1.0 | .2 | ........ |
| 15 | .5 | 18 | 2.5 | 31.5 | 3.0 | 2.6 | 2.3 | 1.0 | 1.0 | ........ |
| 16 | .5 | 10 | 2.5 | 190 | 2.8 | 2.6 | 2.5 | 1.0 | 1.0 | ........ |
| 17 | .5 | 9.2 | 2.5 | 145 | 2.3 | 3.1 | 2.2 | 1.0 | 1.0 | ........ |
| 18 | 1.0 | 8.1 | 2.5 | 43 | 2.6 | 4.4 | 2.2 | 1.0 | .5 | ........ |
| 19 | 1.5 | 8.1 | 2.5 | 34.5 | 4.4 | 3.1 | 1.3 | .8 | .4 | ........ |
| 20 | 1.5 | 7.0 | 12 | 26 | 23.4 | 2.6 | 1.3 | 1.0 | .3 | ........ |
| 21 | 1.5 | 7.0 | 190 | 15.9 | 12.9 | 2.6 | 1.3 | 1.0 | .1 | ........ |
| 22 | 1.5 | 8.1 | 18 | 12.5 | 5.0 | 2.6 | 1.3 | 1.0 | .3 | ........ |
| 23 | 1.5 | 8.1 | 8.1 | 8.3 | 4.0 | 2.6 | 1.0 | .7 | .2 | ........ |
| 24 | 1.5 | 8.1 | 10 | 6.0 | 4.0 | 2.6 | 7.0 | .7 | .2 | ........ |
| 25 | 1.5 | 8.1 | 6.0 | 7.7 | 4.2 | 2.6 | 1.1 | .7 | .2 | ........ |
| 26 | 1.5 | 34 | 6.0 | 6.0 | 4.0 | 8.5 | 1.1 | .5 | .2 | ........ |
| 27 | 1.5 | 30 | 4.0 | 5.2 | 4.0 | 14.7 | .8 | .5 | .1 | ........ |
| 28 | 1.5 | 16 | 4.0 | 5.0 | 3.1 | 69 | 1.1 | .4 | .1 | ........ |
| 29 | 1.5 | 12 | 3.2 | 4.2 | ........ | 54 | .8 | .5 | .1 | ........ |
| 30 | 2.0 | 10 | 3.2 | 4.4 | ........ | 36 | .7 | .4 | .1 | ........ |
| 31 | 2.0 | ........ | 4.0 | 4.0 | ........ | 37.5 | ........ | .3 | ........ | ........ |

*Daily discharge, in second-feet, of Cottonwood Creek near Jamul, Cal., for 1909–1911—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | |
| 1 | | 2.3 | 2.2 | 3.4 | 3.7 | 2.2 | 1.1 | 1.0 | 1.7 |
| 2 | | 2.3 | 2.2 | 3.4 | 2.6 | 2.2 | 1.5 | 1.1 | 1.7 |
| 3 | | 2.2 | 2.1 | 3.4 | 3.7 | 3.7 | 1.4 | 1.0 | 1.7 |
| 4 | | 2.0 | 2.1 | 2.6 | 2.3 | 13 | 1.4 | 1.1 | 1.4 |
| 5 | | 2.2 | 2.5 | 2.8 | 35 | 7.2 | 1.4 | 1.0 | 1.3 |
| 6 | | 2.2 | 2.5 | 2.6 | 3.7 | 2.4 | 1.4 | 1.0 | 1.2 |
| 7 | | 2.2 | 2.2 | 2.0 | 3.7 | 2.0 | 1.5 | 1.0 | .7 |
| 8 | | 2.2 | 2.2 | 2.1 | 3.7 | 2.0 | 1.4 | .8 | .7 |
| 9 | | 2.2 | 2.2 | 2.6 | 4.4 | 2.1 | 1.5 | .9 | .5 |
| 10 | | 1.8 | 2.2 | 27 | 4.6 | 3.0 | 1.4 | .8 | .4 |
| 11 | | 1.8 | 2.2 | 5.6 | 3.7 | 3.4 | 1.2 | .8 | .3 |
| 12 | | 2.2 | 2.3 | 3.2 | 3.4 | 2.1 | 1.1 | .9 | .3 |
| 13 | | 1.2 | 2.4 | 3.1 | 3.1 | 2.0 | 1.1 | .9 | .3 |
| 14 | | 7.7 | 2.2 | 2.4 | 28 | 2.0 | 1.0 | 1.5 | .3 |
| 15 | | 4.3 | 2.3 | 3.2 | 5.9 | 1.5 | 1.0 | 1.0 | .3 |
| 16 | | 1.8 | 2.4 | 2.6 | 1.7 | 1.5 | 1.0 | 1.1 | .3 |
| 17 | | 2.4 | 2.2 | 2.5 | 1.6 | 1.4 | 1.0 | .8 | .2 |
| 18 | | 2.3 | 2.2 | 2.5 | 3.2 | 1.1 | 1.0 | .8 | .2 |
| 19 | 1.[illegible] | 1.9 | 2.2 | 2.3 | 3.3 | 1.1 | 1.0 | .7 | .2 |
| 20 | .2 | 2.5 | 1.2 | 2.3 | 3.1 | 1.2 | 1.0 | .7 | .2 |
| 21 | .3 | 2.3 | 2.3 | 2.3 | 2.5 | 1.4 | 1.2 | 1.3 | .2 |
| 22 | .2 | 2.3 | 2.3 | 2.3 | 2.0 | 1.4 | 1.0 | 1.3 | .2 |
| 23 | .5 | 2.3 | 2.2 | 2.3 | 2.0 | 1.4 | 1.1 | 1.3 | .3 |
| 24 | .5 | 2.3 | 2.3 | 2.3 | 2.0 | 1.1 | 1.0 | 1.0 | .2 |
| 25 | .4 | 2.3 | 2.2 | 2.3 | 1.9 | 1.1 | 1.1 | .8 | .2 |
| 26 | .5 | 2.4 | 2.4 | 2.3 | 1.5 | 1.1 | 1.5 | 1.0 | .2 |
| 27 | .5 | 2.2 | 2.4 | 2.5 | 2.3 | 1.1 | 1.5 | .7 | .1 |
| 28 | .4 | 2.2 | 2.2 | 2.3 | 2.4 | 1.1 | 1.5 | 1.3 | [illegible] |
| 29 | 1.1 | 2.2 | 1.7 | 2.4 | | 1.1 | 1.0 | 1.0 | [illegible] |
| 30 | [illegible] | 2.5 | 1.7 | 2.4 | | 1.1 | 1.0 | 1.0 | [illegible] |
| 31 | [illegible] | | 2.5 | 2.7 | | 1.1 | | 1.0 | |

| Day. | Dec. | Day. | Dec. | Day. | Dec. |
|---|---|---|---|---|---|
| 1911. | | 1911. | | 1911. | |
| 1 | 4.2 | 11 | .9 | 21 | 1.5 |
| 2 | [illegible] | 12 | .9 | 22 | 1.5 |
| 3 | [illegible] | 13 | .9 | 23 | 1.5 |
| 4 | [illegible] | 14 | .9 | 24 | 1.5 |
| 5 | .6 | 15 | .9 | 25 | 1.5 |
| 6 | .6 | 16 | .9 | 26 | 1.5 |
| 7 | .6 | 17 | 1.5 | 27 | 1.5 |
| 8 | .6 | 18 | 1.5 | 28 | 1.5 |
| 9 | .6 | 19 | 1.5 | 29 | 1.5 |
| 10 | .9 | 20 | 1.5 | 30 | 1.5 |
| | | | | 31 | 1.5 |

NOTE.—Daily discharge determined from a rating curve well defined below 55 second-feet. Discharge Jan. [illegible]–28, 1910, and during 1911 furnished by Southern California Mountain Water Co. Creek dry on all days for which no discharge is given.

*Discharge measurements of Dulzura conduit near Jamul, Cal., 1909–10.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1909. | | *Feet.* | *Sec.-ft.* | 1910. | | *Feet.* | *Sec.-ft.* |
| Feb. 24 | W. V. Hardy | 3.40 | 52.0 | Jan. 25 | W. V. Hardy | 0.94 | 6.1 |
| 24 | .....do | 3.40 | 51.0 | 25 | .....do | 1.26 | 12.0 |
| Apr. 21 | Clapp and Hardy | 3.70 | 54.2 | 25 | .....do | 1.56 | 18.0 |
| May 27 | W. V. Hardy | 1.65 | 16.2 | 25 | .....do | 2.23 | 26.0 |
| | | | | 25 | .....do | 2.75 | 38.0 |
| 1910. | | | | 25 | .....do | 3.28 | 48.0 |
| Jan. 25 | W. V. Hardy | 0.45 | 0.9 | 25 | .....do | 3.50 | 53.0 |
| 25 | .....do | .49 | 1.1 | Mar. 13 | .....do | 1.85 | 19.0 |
| 25 | .....do | .62 | 2.3 | June 5 | .....do | .37 | .8 |

*Daily gage height, in feet, of Dulzura conduit near Jamul, Cal., for 1909–10.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | |
| 1 | 0.6 | 2.0 | 3.4 | 3.6 | 2.5 | 1.3 | 0.4 |
| 2 | .6 | 2.0 | 3.3 | 3.6 | 2.7 | 1.2 | .5 |
| 3 | .6 | 3.0 | 3.0 | 3.7 | 2.5 | 1.1 | .35 |
| 4 | .6 | 3.0 | 3.65 | 3.7 | 2.4 | 1.2 | .35 |
| 5 | .6 | 2.75 | 3.4 | 3.7 | 2.4 | 1.1 | .3 |
| 6 | .6 | 2.5 | 3.4 | 3.7 | 2.3 | 4.2 | .3 |
| 7 | .6 | 2.5 | 3.45 | 3.8 | 2.3 | 1.2 | .3 |
| 8 | .6 | 2.8 | 3.4 | 3.5 | 2.4 | 1.2 | .25 |
| 9 | .6 | 3.1 | 3.4 | 3.5 | 2.2 | 1.2 | .2 |
| 10 | .8 | 3.1 | 3.25 | 3.7 | 2.1 | 1.2 | .2 |
| 11 | .7 | 3.4 | 3.5 | 3.7 | 2.2 | 1.1 | ........ |
| 12 | .6 | 3.0 | 3.4 | 3.7 | 2.1 | 1.2 | ........ |
| 13 | 1.0 | 2.85 | 3.15 | 3.7 | 2.3 | 1.1 | ........ |
| 14 | 3.2 | 2.75 | 3.15 | 3.7 | 2.3 | 1.0 | ........ |
| 15 | 2.2 | 3.0 | 3.1 | 3.7 | 2.1 | 1.0 | ........ |
| 16 | 1.9 | 2.9 | 3.1 | 3.7 | 2.1 | 1.0 | ........ |
| 17 | 1.6 | 2.9 | 3.1 | 3.6 | 2.0 | 1.0 | ........ |
| 18 | 1.8 | 3.0 | 3.1 | 3.7 | 2.0 | .9 | ........ |
| 19 | 1.1 | 3.35 | 3.3 | 3.7 | 2.0 | 1.0 | ........ |
| 20 | 1.0 | 3.35 | 3.05 | 3.7 | 1.9 | 1.1 | ........ |
| 21 | .9 | 3.35 | ........ | 3.7 | 1.9 | 1.0 | ........ |
| 22 | ........ | 2.85 | ........ | 3.7 | 1.9 | .9 | ........ |
| 23 | ........ | 3.05 | 1.7 | 3.4 | 1.9 | .9 | ........ |
| 24 | ........ | 3.4 | 3.5 | 3.3 | 1.9 | .7 | ........ |
| 25 | ........ | 3.35 | 3.5 | 3.3 | 1.9 | .7 | ........ |
| 26 | 1.6 | 3.4 | 3.55 | 3.1 | 1.7 | .7 | ........ |
| 27 | 1.5 | 3.4 | 3.35 | 3.0 | 1.7 | .6 | ........ |
| 28 | 2.1 | 3.4 | 3.5 | 3.0 | 1.6 | .6 | ........ |
| 29 | 1.9 | ........ | 3.45 | 3.3 | 1.6 | .6 | ........ |
| 30 | 2.2 | ........ | 3.6 | 2.6 | 1.6 | .6 | ........ |
| 31 | 2.3 | ........ | 3.6 | ........ | 1.5 | ........ | ........ |

*Daily gage height, in feet, of Dulzura conduit near Jamul, Cal., for 1909–10*—Contd.

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | Dec. |
|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | |
| 1 | | 1.95 | 3.0 | 2.2 | | 1.2 | 0.3 | |
| 2 | | .0 | 3.35 | 2.15 | | 1.3 | .32 | |
| 3 | | 1.6 | 3.0 | 2.1 | | 1.3 | .32 | |
| 4 | | 3.4 | 2.75 | 2.05 | 1.3 | 1.25 | .32 | |
| 5 | | 3.35 | 2.85 | 2.0 | 2.65 | 1.15 | .34 | |
| 6 | 1.0 | 3.6 | 2.7 | 2.0 | 2.8 | 1.1 | .3 | |
| 7 | .95 | 3.8 | 2.7 | 2.0 | 2.7 | .98 | .3 | |
| 8 | 1.1 | 3.7 | 2.75 | 2.0 | 2.5 | .92 | .3 | |
| 9 | 2.25 | 3.7 | 2.75 | 2.1 | 2.4 | .9 | .25 | |
| 10 | 3.45 | 3.7 | 2.7 | 1.9 | 2.4 | .9 | .2 | |
| 11 | 2.4 | 3.65 | 2.55 | 1.8 | 2.4 | .88 | .15 | |
| 12 | 1.6 | 3.7 | 2.5 | 1.8 | 3.2 | .8 | .15 | |
| 13 | 1.35 | 3.55 | 2.45 | 1.8 | 3.0 | .8 | .12 | |
| 14 | 1.25 | 3.45 | 2.45 | 1.75 | 2.55 | .8 | .15 | |
| 15 | 1.15 | 3.5 | 2.6 | 1.85 | 2.3 | .85 | | |
| 16 | 1.05 | 3.65 | 2.5 | 1.9 | 2.1 | .92 | | |
| 17 | .95 | 3.6 | 2.3 | 2.1 | 1.9 | .7 | | |
| 18 | .9 | 3.5 | 2.4 | 2.6 | 1.85 | .65 | | |
| 19 | .9 | 3.7 | 2.6 | 2.4 | 1.7 | .65 | | |
| 20 | 2.05 | 3.65 | 3.5 | 2.2 | 1.65 | .85 | | |
| 21 | 3.5 | 3.7 | 2.8 | 2.6 | 1.65 | .8 | | |
| 22 | 2.65 | 3.7 | 2.8 | 2.2 | 1.5 | .75 | | |
| 23 | 2.5 | 3.7 | 2.7 | 2.4 | 1.45 | .7 | | |
| 24 | 2.4 | 3.7 | 2.5 | 2.1 | .65 | .6 | | |
| 25 | 2.3 | 3.4 | 2.6 | 2.3 | 1.25 | .55 | | |
| 26 | 2.05 | 3.4 | 2.4 | 3.65 | 1.15 | .55 | | |
| 27 | 2.0 | 3.25 | 2.4 | 3.4 | 1.05 | .52 | | 0.3 |
| 28 | 1.95 | 3.15 | 2.25 | 3.55 | 1.15 | .45 | | .3 |
| 29 | 1.95 | 3.15 | | 3.6 | 1.15 | .41 | | .3 |
| 30 | 1.95 | 3.05 | | 3.6 | 1.2 | .28 | | .3 |
| 31 | 2.35 | 2.9 | | 3.65 | | .32 | | .3 |

NOTE.—The conduit was dry on days for which no gage height is given.

*Daily discharge, in second-feet, of Dulzura conduit near Jamul, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | |
| 1 | 2.1 | 28.2 | 59 | 54 | 32.1 | 11.8 | 0.7 |
| 2 | 2.1 | 25.2 | 48 | 54 | 36 | 10.3 | 1.1 |
| 3 | 2.1 | 28.4 | 42 | 56 | 32.1 | 8.8 | .5 |
| 4 | 2.1 | 42.0 | 55 | 56 | 30.2 | 10.3 | .6 |
| 5 | 2.1 | 37.0 | 59 | 56 | 30.2 | 8.8 | .4 |
| 6 | 2.1 | 32.1 | 59 | 56 | 25.4 | 10.3 | .4 |
| 7 | 2.1 | 32.1 | 51 | 58 | 26.4 | 10.3 | .4 |
| 8 | 2.1 | 38 | 59 | 52 | 30.2 | 10.3 | .3 |
| 9 | 2.1 | 44 | 59 | 52 | 25.6 | 10.3 | .2 |
| 10 | 4.5 | 44 | 47 | 56 | 24.9 | 10.3 | .2 |
| 11 | 3.2 | 44 | 52 | 56 | 26.6 | 8.8 | |
| 12 | 2.1 | 42 | 59 | 56 | 24.9 | 10.3 | |
| 13 | 7.3 | 39 | 45 | 56 | 28.4 | 8.8 | |
| 14 | 46.0 | 37 | 45 | 56 | 28.4 | 7.3 | |
| 15 | 26.6 | 42 | 44 | 56 | 24.9 | 7.3 | |
| 16 | 21.5 | 40 | 44 | 56 | 24.9 | 7.3 | |
| 17 | 16.6 | 40 | 44 | 54 | 23.2 | 7.3 | |
| 18 | 11.8 | 42 | 44 | 56 | 23.2 | 5.9 | |
| 19 | 8.8 | 40 | 48 | 56 | 23.2 | 7.3 | |
| 20 | 7.3 | 40 | 43 | 56 | 21.5 | 8.8 | |
| 21 | 5.9 | 40 | | 56 | 21.5 | 7.3 | |
| 22 | | 39 | | 56 | 21.5 | 5.9 | |
| 23 | | 43 | 18.2 | 50 | 21.5 | 5.9 | |
| 24 | | 59 | 52 | 48 | 21.5 | 3.2 | |
| 25 | | 49 | 52 | 48 | 21.5 | 3.2 | |
| 26 | 16.6 | 50 | 53 | 44 | 18.2 | 3.2 | |
| 27 | 15.0 | 50 | 49 | 42 | 18.2 | 2.1 | |
| 28 | 24.9 | 50 | 52 | 42 | 16.6 | 2.1 | |
| 29 | 21.5 | | 51 | 48 | 16.6 | 2.1 | |
| 30 | 26.6 | | 54 | 34 | 16.6 | 2.1 | |
| 31 | 28.4 | | 54 | | 15.0 | | |

*Daily discharge, in second-feet, of Dulzura conduit near Jamul, Cal., for 1909–1911*—Con.

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | |
| 1 | | 20.6 | 42 | 26.6 | | 10.3 | 0.4 |
| 2 | | | 49 | 25.7 | | 11.8 | .5 |
| 3 | | 16.6 | 42 | 24.9 | | 11.8 | .5 |
| 4 | | 50 | 37 | 24.0 | 11.8 | 11.0 | .5 |
| 5 | | 49 | 39 | 23.2 | 35 | 9.5 | .5 |
| 6 | 7.3 | 54 | 36 | 23.2 | 38 | 8.8 | .4 |
| 7 | 6.6 | 58 | 36 | 23.2 | 36 | 7.0 | .4 |
| 8 | 8.8 | 56 | 37 | 23.2 | 32.1 | 6.2 | .4 |
| 9 | 27.5 | 56 | 37 | 24.9 | 30.2 | 5.9 | .3 |
| 10 | 51 | 56 | 36 | 21.5 | 30.2 | 5.9 | .2 |
| 11 | 30.2 | 55 | 33 | 19.8 | 30.2 | 5.6 | .2 |
| 12 | 16.6 | 56 | 32.1 | 19.8 | 26.6 | 4.5 | .2 |
| 13 | 12.6 | 53 | 31.1 | 19.8 | 42 | 4.5 | .1 |
| 14 | 11.0 | 51 | 31.1 | 19.0 | 33 | 4.5 | .2 |
| 15 | 9.6 | 52 | 34 | 20.6 | 28.4 | 5.2 | |
| 16 | 8.0 | 55 | 32.1 | 21.5 | 24.9 | 4.8 | |
| 17 | 6.6 | 54 | 28.4 | 24.9 | 21.5 | 3.2 | |
| 18 | 5.9 | 52 | 30.2 | 34 | 20.6 | 2.6 | |
| 19 | 5.9 | 56 | 34 | 30.2 | 18.2 | 2.6 | |
| 20 | 24.0 | 55 | 52 | 26.6 | 17.4 | 5.2 | |
| 21 | 52 | 56 | 38 | 23.2 | 17.4 | 4.5 | |
| 22 | 35 | 56 | 38 | 26.6 | 15.0 | 3.8 | |
| 23 | 32.1 | 56 | 36 | 30.2 | 14.2 | 3.2 | |
| 24 | 30.2 | 56 | 32.1 | 24.9 | 2.6 | 2.1 | |
| 25 | 28.4 | 50 | 34 | 28.4 | 11.0 | 1.6 | |
| 26 | 24.0 | 50 | 30.2 | 55 | 9.5 | 1.6 | |
| 27 | 23.2 | 47 | 30.2 | 50 | 8.0 | 1.4 | |
| 28 | 20.6 | 45 | 27.5 | 53 | 9.5 | .9 | |
| 29 | 20.6 | 45 | | 54 | 9.5 | .7 | |
| 30 | 20.6 | 43 | | 54 | 10.3 | .4 | |
| 31 | 29.3 | 40 | | 55 | | .4 | |

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | Day. | Dec. | Jan. | Feb. | Mar. | Apr. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | 1910–11. | | | | | |
| 1 | | | 19.2 | 24.0 | 8.4 | 16 | | 20.0 | 42.5 | 19.2 | 7.0 |
| 2 | | | 16.3 | 32.7 | 20.0 | 17 | | 4.6 | 32.7 | 18.6 | 7.0 |
| 3 | | | 32.7 | 42.5 | 16.3 | 18 | | 16.3 | 28.2 | 17.0 | 7.0 |
| 4 | | | 65.1 | 65.1 | 13.0 | 19 | | 7.0 | 26.0 | 14.5 | 7.0 |
| 5 | | | 62.1 | 32.7 | 9.8 | 20 | | 7.0 | 24.0 | 14.2 | 7.0 |
| 6 | | | 37.4 | 24.0 | 9.8 | 21 | | 4.6 | 20.0 | 13.5 | 7.0 |
| 7 | | | 20.0 | 24.0 | 24.0 | 22 | | 4.6 | 13.0 | 16.3 | 7.0 |
| 8 | | | 47.9 | 28.2 | 16.3 | 23 | | 7.0 | 9.8 | 14.5 | 5.8 |
| 9 | | | 42.5 | 32.7 | 13.0 | 24 | | 13.0 | 9.8 | 13.2 | 5.8 |
| 10 | | | 40.5 | 59.2 | 11.4 | 25 | | 4.6 | 14.2 | 13.2 | 5.8 |
| 11 | | | 37.4 | 37.4 | 9.8 | 26 | | 14.4 | 13.0 | 13.0 | 5.8 |
| 12 | | | 32.7 | 37.4 | 9.8 | 27 | 0.4 | 7.0 | 35.1 | 12.4 | 5.8 |
| 13 | | | 18.1 | 28.2 | 9.8 | 28 | .4 | 4.6 | 28.2 | 11.0 | 5.8 |
| 14 | | | 50.7 | 24.0 | 8.4 | 29 | .4 | 7.0 | | 10.5 | 5.8 |
| 15 | | 4.6 | 47.9 | 20.7 | 8.4 | 30 | .4 | 13.0 | | 8.4 | 5.8 |
| | | | | | | 31 | .4 | 9.9 | | 8.4 | |

NOTE.—Daily discharge 1909–10 determined from a rating curve well defined between 0.7 and 54 second-feet. Discharge for 1911 furnished by the Southern California Mountain Water Co. Conduit was dry on all days for which no discharge is given. Probably a small amount of water in conduit during May, 1911.

*Daily discharge, in second-feet, of Cottonwood Creek and Dulzura conduit near Jamul, Cal., for 1909–1911.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 10 | 38 | [illegible] | 186 | 38 | 14 | 2.2 | ........ | 10 |
| 2 | 10 | 40 | 44 | 175 | 40 | 12 | 2.6 | ........ | 5 |
| 3 | 10 | 36 | 91 | 167 | 36 | 11 | 1.6 | ........ | 4 |
| 4 | 10 | 77 | 77 | 148 | 34 | 12 | 1.6 | ........ | 3 |
| 5 | 10 | 44 | 70 | 148 | 34 | 11 | 1.4 | ........ | 3 |
| 6 | 10 | 40 | 67 | 134 | 32 | 12 | 1.4 | 9.0 | 7 |
| 7 | 10 | 40 | 30 | 130 | 32 | 12 | 1.4 | 2.5 | 6 |
| 8 | 10 | 198 | 75 | 101 | 34 | 12 | 1.6 | 1.0 | 3 |
| 9 | 10 | 113 | 72 | 91 | 29 | 12 | 1.2 | 1.0 | 2.5 |
| 10 | 14 | 93 | 67 | 92 | 28 | 12 | 1.2 | 1.0 | 1.5 |
| 11 | 73 | 90 | 62 | 90 | 30 | 10 | 1.0 | ........ | 1.5 |
| 12 | 20 | 174 | 38 | 96 | 28 | 12 | 1.0 | ........ | 1.0 |
| 13 | 24 | 267 | 51 | 92 | 31 | 10 | 1.0 | ........ | 1.0 |
| 14 | 254 | 168 | 40 | 75 | 31 | 8.8 | 1.0 | .5 | .5 |
| 15 | 93 | 174 | 48 | 73 | 27 | 8.8 | .5 | .5 | .5 |
| 16 | 98 | 128 | 40 | 60 | 27 | 8.8 | .5 | 5.0 | .5 |
| 17 | 51 | 102 | 50 | 64 | 26 | 8.8 | .5 | 5.0 | .5 |
| 18 | 46 | 93 | 48 | 64 | 26 | 7.4 | .3 | 2.0 | .5 |
| 19 | 39 | 79 | 32 | 64 | 26 | 8.8 | .4 | 10.0 | .5 |
| 20 | 24 | 71 | 47 | 64 | 24 | 10.0 | ........ | 4.0 | .5 |
| 21 | 21 | 275 | 47 | 64 | 24 | 8.8 | ........ | 1.5 | .5 |
| 22 | 78 | 171 | 280 | 64 | 24 | 7.4 | ........ | 1.0 | .5 |
| 23 | 464 | 135 | 178 | 56 | 24 | 7.4 | ........ | .5 | 1.0 |
| 24 | 464 | 142 | 162 | 54 | 24 | 4.7 | .3 | .5 | 1.5 |
| 25 | 620 | 118 | 152 | 52 | 24 | 4.7 | .3 | .5 | 1.5 |
| 26 | 437 | 112 | 163 | 48 | 21 | 4.7 | .3 | ........ | 1.5 |
| 27 | 147 | 101 | 322 | 46 | 21 | 3.6 | 1.5 | 7.0 | 1.5 |
| 28 | 157 | 97 | 302 | 45 | 19 | 3.6 | 1.5 | 20 | 1.0 |
| 29 | 30 | ........ | 486 | 57 | 19 | 3.1 | .5 | .5 | 1.0 |
| 30 | 78 | ........ | 357 | 43 | 19 | 3.1 | ........ | 17 | 1.0 |
| 31 | 64 | ........ | 327 | ........ | 17 | ........ | ........ | 22 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | |
| 1 | 1.0 | 2.5 | 8 | 90 | 47 | 31 | 65 | 11 | 0.8 | 0.1 |
| 2 | 1.0 | 2.5 | 12 | 33 | 53 | 30 | 54 | 13 | .9 | .1 |
| 3 | 1.5 | 2.5 | 10 | 61 | 46 | 29 | 40 | 12 | .9 | .1 |
| 4 | 2.0 | 2.5 | 8 | 73 | 42 | 28 | 30 | 12 | .9 | ........ |
| 5 | 1.5 | 2.5 | 30 | 127 | 43 | 26 | 42 | 11 | .9 | ........ |
| 6 | 1.5 | 2.5 | 22 | 90 | 40 | 26 | 42 | 11 | .7 | ........ |
| 7 | 1.5 | 2.5 | 13 | 90 | 40 | 27 | 40 | 9.3 | .8 | ........ |
| 8 | 1.0 | 2.5 | 15 | 83 | 41 | 26 | 36 | 8.3 | .7 | ........ |
| 9 | .5 | 6 | 120 | 81 | 40 | 28 | 34 | 6.9 | .6 | ........ |
| 10 | .5 | 6 | 81 | 74 | 39 | 25 | 33 | 6.9 | .4 | ........ |
| 11 | 11 | 8 | 36 | 77 | 36 | 23 | 33 | 6.6 | .4 | ........ |
| 12 | 1.0 | 10 | 21 | 79 | 35 | 22 | 31 | 5.3 | .4 | ........ |
| 13 | .5 | 9 | 15 | 68 | 34 | 22 | 46 | 5.5 | .3 | ........ |
| 14 | .5 | 12 | 14 | 76 | 34 | 22 | 36 | 5.5 | .4 | ........ |
| 15 | .5 | 18 | 12 | 84 | 37 | 23 | 31 | 6.2 | 1.0 | ........ |
| 16 | .5 | 10 | 10 | 245 | 35 | 24 | 27 | 5.8 | 1.0 | ........ |
| 17 | .5 | 9 | 9.1 | 199 | 31 | 28 | 24 | 4.2 | 1.0 | ........ |
| 18 | 1.0 | 8 | 8.4 | 95 | 33 | 38 | 23 | 3.6 | .5 | ........ |
| 19 | 1.5 | 8 | 8.4 | 90 | 38 | 33 | 20 | 3.4 | .4 | ........ |
| 20 | 1.5 | 7 | 36 | 81 | 75 | 29 | 19 | 6.2 | .3 | ........ |
| 21 | 1.5 | 7 | 242 | 72 | 51 | 26 | 19 | 5.5 | .1 | ........ |
| 22 | 1.5 | 8 | 53 | 68 | 43 | 29 | 16 | 4.8 | .3 | ........ |
| 23 | 1.5 | 8 | 40 | 64 | 40 | 33 | 15 | 3.9 | .2 | ........ |
| 24 | 1.5 | 8 | 40 | 62 | 36 | 28 | 9.6 | 2.8 | .2 | ........ |
| 25 | 1.5 | 8 | 34 | 58 | 38 | 32 | 12 | 2.3 | .2 | ........ |
| 26 | 1.5 | 34 | 30 | 56 | 34 | 64 | 11 | 2.1 | .2 | ........ |
| 27 | 1.5 | 30 | 27 | 52 | 34 | 65 | 8.8 | 1.9 | .1 | ........ |
| 28 | 1.5 | 16 | 25 | 50 | 31 | 122 | 11 | 1.3 | .1 | ........ |
| 29 | 1.5 | 12 | 24 | 49 | ........ | 108 | 10 | 1.2 | .1 | ........ |
| 30 | 2.0 | 10 | 24 | 47 | ........ | 90 | 11 | .8 | .1 | ........ |
| 31 | 2.0 | ........ | 33 | 44 | ........ | 92 | ........ | .7 | ........ | ........ |

*Daily discharge, in second-feet, of Cottonwood Creek and Dulzura conduit near Jamul, Cal., for 1909–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | |
| 1 | ........ | 1.3 | 2.2 | 3.4 | 23 | 26 | 9.5 | 1.0 | 1.7 | 0.1 |
| 2 | ........ | 1.8 | 2.2 | 3.4 | 19 | 35 | 22 | 1.1 | 1.7 | .1 |
| 3 | ........ | 3.1 | 2.1 | 3.4 | 36 | 46 | 18 | 1.0 | 1.7 | .1 |
| 4 | ........ | 5.0 | 2.1 | 2.6 | 68 | 78 | 14 | 1.1 | 1.4 | .1 |
| 5 | ........ | 3.1 | 2.5 | 2.6 | 97 | 40 | 11 | 1.0 | 1.3 | .6 |
| 6 | ........ | 2.2 | 2.5 | 2.6 | 41 | 26 | 11 | 1.0 | 1.2 | .6 |
| 7 | ........ | 2.2 | 2.2 | 2.0 | 24 | 26 | 26 | 1.0 | .7 | .6 |
| 8 | ........ | 2.2 | 2.2 | 2.0 | 52 | 30 | 18 | .8 | .7 | .6 |
| 9 | ........ | 2.2 | 2.2 | 2.6 | 47 | 35 | 14 | .8 | .5 | .6 |
| 10 | ........ | 1.8 | 2.2 | 11 | 45 | 62 | 13 | .8 | .4 | .9 |
| 11 | ........ | 1.8 | 2.1 | 8.6 | 41 | 43 | 11 | .8 | .2 | .9 |
| 12 | ........ | 2.2 | 1.8 | 3.1 | 36 | 40 | 11 | .8 | .2 | .9 |
| 13 | ........ | 3.1 | 1.8 | 3.1 | 21 | 30 | 11 | .8 | .2 | .9 |
| 14 | ........ | 7.7 | 2.2 | 2.8 | 73 | 26 | 9.4 | 1.5 | .2 | .9 |
| 15 | ........ | 4.8 | 1.8 | 7.7 | 54 | 22 | 9.4 | 1.0 | .2 | .9 |
| 16 | ........ | 3.6 | 1.8 | 23 | 46 | 21 | 8.0 | 1.1 | .2 | .9 |
| 17 | ........ | 2.6 | 2.1 | 7.1 | 36 | 20 | 8.0 | .8 | .2 | 1.5 |
| 18 | ........ | 2.3 | 2.1 | 19 | 31 | 18 | 8.0 | .8 | .2 | 1.5 |
| 19 | 0.1 | 3.8 | 2.2 | 9.3 | 28 | 16 | 8.0 | .7 | .2 | 1.5 |
| 20 | .2 | 2.5 | 3.1 | 9.3 | 27 | 15 | 8.0 | .7 | .2 | 1.5 |
| 21 | .3 | 3.3 | 2.3 | 6.9 | 22 | 15 | 8.1 | 1.3 | .2 | 1.5 |
| 22 | .2 | 2.3 | 2.3 | 6.9 | 15 | 18 | 8.0 | 1.3 | .2 | 1.5 |
| 23 | .5 | 2.2 | 2.2 | 9.3 | 12 | 16 | 6.9 | 1.3 | .2 | 1.5 |
| 24 | .5 | 2.2 | 2.2 | 15 | 12 | 14 | 6.8 | 1.0 | .2 | 1.5 |
| 25 | .4 | 2.2 | 2.1 | 6.9 | 16 | 14 | 6.9 | .8 | .2 | 1.5 |
| 26 | .5 | 2.6 | 2.6 | 17 | 14 | 14 | 7.3 | 1.0 | .2 | 1.5 |
| 27 | .5 | 2.3 | 2.2 | 9.3 | 37 | 14 | 7.3 | .7 | .1 | 1.5 |
| 28 | .8 | 2.3 | 2.5 | 6.9 | 31 | 12 | 7.3 | 1.3 | ........ | 1.5 |
| 29 | 1.0 | 2.3 | 2.1 | 9.6 | ........ | 12 | 6.8 | 1.0 | ........ | 1.5 |
| 30 | 1.1 | 2.5 | 2.1 | 16 | ........ | 9.5 | 6.8 | 1.0 | ........ | 1.5 |
| 31 | 1.2 | ........ | 2.9 | 14 | ........ | 9.5 | ........ | 1.0 | ........ | 1.5 |

NOTE.—These values include both the creek and conduit. Both creek and conduit were dry on days for which no discharge is given. Data during 1909–1911 have been furnished by the Southern California Mountain Water Co.

*Monthly discharge of Cottonwood Creek near Jamul, Cal., for 1906–1911.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1906. | | | | | |
| January | 59 | 2.0 | 15.5 | 953 | |
| February | 100 | 7.0 | 24.1 | 1,340 | |
| March | 5,800 | 5.0 | 594 | 36,500 | |
| April | 350 | 93 | 176 | 10,500 | |
| May | 93 | 20 | 54.9 | 3,380 | |
| June | 55 | 20 | 30.5 | 1,820 | |
| July | 93 | 2.0 | 12.0 | 738 | |
| August | 51 | .9 | 6.0 | 369 | |
| September | 4.8 | .8 | 1.3 | 77 | |
| The period | .......... | .......... | .......... | 55,700 | |
| 1906–7. | | | | | |
| October | 7.1 | 0.9 | 3.0 | 184 | |
| November | 33 | 7.6 | 20.4 | 1,210 | |
| December | 375 | 30 | 80.8 | 4,970 | |
| January | 1,170 | 46 | 175 | 10,800 | B. |
| February | 116 | 36 | 66.9 | 3,720 | B. |
| March | 648 | 44 | 191 | 11,700 | B. |
| April | 306 | 64 | 111 | 4,600 | B. |
| May | 66 | 28 | 44.4 | 2,730 | B. |
| June | 49 | 9 | 23.2 | 1,380 | B. |
| July | 8.7 | 2.2 | 4.2 | 258 | C. |
| August | 2.5 | .1 | 1.2 | 74 | C. |
| September | 2 | .3 | 1.0 | 60 | C. |
| The year | 1,170 | .1 | 60.2 | 41,700 | |

*[illegible]thly discharge of [illegible] Creek near [illegible], Cal., for 190[illegible]–1911*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
| --- | --- | --- | --- | --- | --- |
| | Maximum. | Minimum. | Mean. | | |
| [illegible]–8. | | | | | |
| [illegible]ber | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible]ember | [illegible] | [illegible] | [illegible] | [illegible]0 | [illegible] |
| [illegible]ember | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible]ary | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible]ary | [illegible] | [illegible] | [illegible]4 | [illegible] | [illegible] |
| [illegible]ch | | | [illegible]0 | [illegible] | [illegible] |
| [illegible] | | | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible]1 | [illegible]5 | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible]ust | | [illegible] | [illegible] | | [illegible] |
| [illegible]ember | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible]. | | | | | |
| [illegible]ber | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible]ember | | | [illegible]1 | [illegible] | [illegible] |
| [illegible]ember | | [illegible] | [illegible] | [illegible]2 | [illegible] |
| [illegible]ary | [illegible] | | [illegible] | [illegible]10 | [illegible] |
| [illegible]ary | [illegible] | | | [illegible] | [illegible] |
| [illegible]ch | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | | [illegible] |
| [illegible]ust | [illegible] | | [illegible] | [illegible]1 | [illegible] |
| [illegible]ember | | | [illegible] | [illegible] | [illegible] |
| The year | [illegible]7 | | [illegible]0 | [illegible] | |
| [illegible]–10. | | | | | |
| [illegible]ber | [illegible] | | [illegible] | [illegible] | [illegible] |
| [illegible]ember | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible]ember | [illegible] | | [illegible] | [illegible] | [illegible] |
| [illegible]ary | [illegible] | [illegible] | | [illegible] | |
| [illegible]ary | | [illegible] | [illegible] | [illegible]0 | |
| [illegible]ch | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | | [illegible] |
| [illegible]ust | | [illegible] | [illegible] | | |
| [illegible]ember | | [illegible] | [illegible] | | |
| The year | [illegible]5 | [illegible] | [illegible] | [illegible] | |
| 1910–11. | | | | | |
| [illegible]ber | [illegible] | | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | | | |
| [illegible] | | [illegible] | | | |
| [illegible]ember | | | [illegible] | [illegible] | |
| The year | [illegible] | | [illegible] | [illegible] | |
| [illegible]1[illegible] | | | | | |
| [illegible] | [illegible] | | | | |
| [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | 4 | 4 | [illegible] |

[illegible] these values include both the discharge of the river at the gage site [illegible]

## PINE VALLEY CREEK NEAR JAMUL, CAL.

Pine Valley Creek flows in a southerly direction and enters Cottonwood Creek about 1 mile north of Barrett's dam. Its drainage area is about half of the total drainage area of Cottonwood Creek above Barrett's dam.

The gaging station, which was located a few hundred feet above the confluence of the two creeks, was established in January, 1906, and discontinued December 31, 1908.

The channel at the station is composed of shifting sand, and is straight for about 200 feet above and 250 feet below the point of measurement. The right bank is high and rocky and not subject to overflow, while the left bank is liable to overflow in very high stages, forming two channels.

In almost all stages measurements could be made by wading, but two wires were stretched across the channel 50 feet apart for convenience in float measurements. There was no cable and car.

The gage was a staff fastened to a small tree.

Conditions for obtaining accurate discharge data were bad. On account of its isolated location only occasional gage readings were made during 1907 and none in 1908. All estimates of discharge are approximate only. No monthly discharges were computed for 1908.

*Discharge measurements of Pine Valley Creek near Jamul, Cal., in 1906-1908.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1906. | | *Feet.* | *Sec.-ft.* | 1907. | | *Feet.* | *Sec.-ft.* |
| Jan. 5 | W. V. Hardy | | 1.8 | Mar. 20 | W. V. Hardy | 4.32 | 38 |
| 19 | do | 3.10 | 14.4 | Apr. 11 | do | 4.35 | 51 |
| 19 | do | 3.20 | 17.6 | 27 | do | 4.20 | 30 |
| 20 | do | 3.45 | 41 | May 19 | do | 3.95 | 17 |
| Feb. 3 | do | 2.94 | 4 | 29 | do | 3.90 | 13 |
| 15 | do | 3.12 | 20 | June 11 | Clapp and Hardy | 3.75 | 14 |
| Mar. 11 | do | 3.00 | 8.2 | 16 | N. L. Hall | 3.77 | 10 |
| Apr. 19 | do | 4.50 | 57 | Dec. 16 | W. V. Hardy | 3.33 | 3.2 |
| May 8 | do | 4.40 | 32 | | | | |
| June 22 | C. H. Lee | 4.20 | 7.7 | 1908. | | | |
| Oct. 5 | W. F. Martin | 4.00 | 0.24 | Jan. 16 | W. V. Hardy | 3.40 | 5.3 |
| Nov. 27 | W. V. Hardy | 4.21 | 6.7 | 27 | do | 3.74 | 20 |
| Dec. 15 | do | 4.30 | 14.6 | Feb. 14 | do | 3.88 | 24 |
| | | | | 23 | do | 3.80 | 20 |
| 1907. | | | | Mar. 12 | do | | 13 |
| Jan. 5 | W. V. Hardy | 4.45 | 27 | 21 | do | | 10 |
| 15 | do | 4.60 | 55 | Apr. 5 | do | | 7.2 |
| Feb. 7 | do | 4.30 | 31 | May 12 | do | | 4.1 |
| 27 | do | 4.30 | 39 | Nov. 18 | do | | .91 |
| Mar. 8 | do | 4.58 | 90 | Dec. 22 | do | | 2.1 |

[illegible] Pine Valley Creek near Jamul, Cal., for 1906.

| Day. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

Monthly discharge of Pine Valley Creek near Jamul, Cal., for 1906-7.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1906.** | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | 3 | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | .3 | .4 | [illegible] | |
| The period | | | | [illegible] | |
| **1906-7.** | | | | | |
| [illegible] | [illegible] | [illegible] | .5 | 40 | |
| [illegible] | 4.3 | .3 | 2.6 | 155 | |
| [illegible] | 224 | 4.2 | 20.1 | 1,240 | |
| [illegible] | 126 | 19 | 46.3 | 3,030 | C. |
| [illegible] | 45 | 25 | 34.5 | 1,930 | C. |
| [illegible] | 229 | 36 | 62.4 | 3,540 | C. |
| [illegible] | 71 | 27 | 45.0 | 2,680 | C. |
| [illegible] | 30 | 12 | 19.5 | 1,220 | C. |
| [illegible] | 16 | 3 | 10.0 | 595 | C |
| [illegible] | 3 | 1 | 2.0 | 123 | D. |
| [illegible] | 1.2 | 0 | .6 | 37 | D. |
| [illegible] | 8 | 0 | .3 | 18 | D. |
| The year | | | 20.6 | 14,900 | |
| **1907.** | | | | | |
| [illegible] | 7 | 1.2 | 3.1 | 191 | D. |
| [illegible] | 3.5 | 2.8 | 3.0 | 179 | D. |
| [illegible] | 5.1 | 2.8 | 3.4 | 209 | D. |

[illegible] discharge January, 1906, to June, 1907, determined by the indirect method for shifting channels. [illegible] of 1907 discharge was estimated by comparison with Cottonwood Creek.

## SWEETWATER RIVER BASIN.

### SWEETWATER RESERVOIR.

The following record of run-off has been kept at the Sweetwater reservoir by the San Diego Land & Town Co.:

*Estimated annual run-off at Sweetwater reservoir.*

[Drainage area, 186 square miles.]

| Year ending June 30— | Rainfall (inches).[a] | Run-off. Total in acre-feet. | Acre-feet per square mile. | Depth in inches on drainage area. |
|---|---|---|---|---|
| 1888 | 16.00 | 7,048 | 37.9 | 0.71 |
| 1889 | 33.55 | 25,253 | 135.7 | 2.57 |
| 1890 | 38.65 | 20,532 | 110.4 | 2.07 |
| 1891 | 37.92 | 21,565 | 115.9 | 2.16 |
| 1892 | 24.58 | 6,198 | 33.3 | .62 |
| 1893 | 26.16 | 16,261 | 87.4 | 1.63 |
| 1894 | 10.12 | 1,338 | 7.2 | .13 |
| 1895 | 35.23 | 73,412 | 395.0 | 7.38 |
| 1896 | 16.41 | 1,321 | 7.1 | .13 |
| 1897 | 23.88 | 6,891 | 37.0 | .69 |
| 1898 | 18.03 | 4 | .0 | .00 |
| 1899 | 13.56 | 245 | 1.3 | .02 |
| 1900 | 16.13 | 0 | .0 | .00 |
| 1901 | 24.82 | 861 | 4.6 | .08 |
| 1902 | 20.25 | 0 | .0 | .00 |
| 1903 | 20.77 | 0 | .0 | .00 |
| 1904 | 14.94 | 0 | .0 | .00 |
| 1905 | 35.95 | 11,730 | 63.1 | 1.19 |
| Mean, 18 years | 23.72 | 10,703 | 57.5 | 1.07 |

[a] Taken as mean between Sweetwater dam and Cuyamaca.

### SWEETWATER RIVER NEAR DESCANSO, CAL.

This station, which is located at the Ellis ranch, 1½ miles below Descanso post office, in the SE. ¼ sec. 25, T. 15 S., R. 3 E., was established November 21, 1905.

Guatay Creek enters the river from the east about 2 miles above the gaging station. About one-fourth second-foot of water is diverted above the station for irrigation on the Ellis ranch. About 20 miles below water for irrigation is pumped from wells along the banks of the stream.

The staff gage is in three sections on the left bank. No change has been made in the datum of the gage since the station was established. Discharge measurements are made from a cable or by wading near the gage.

Discharge for 1910 was determined by the indirect method for shifting channels and from rating tables covering short periods. The record may be considered fair.

*Discharge measurements of Sweetwater River near Dehesa, Cal., in 1905–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1905. | | *Feet.* | *Sec.-ft.* | 1908. | | *Feet.* | *Sec.-ft.* |
| Sept. [illegible][a] | D. W. Murphy | | 0.4 | Mar. 22 | W. V. Hardy | [illegible] | [illegible] |
| Nov. 21 | C. H. Lee | 3.54 | 1.1 | Apr. 3 | do | 3.44 | [illegible] |
| Dec. 16 | do | 3.62 | 2.5 | 13 | do | 3.44 | [illegible] |
| | | | | 25 | do | [illegible] | [illegible] |
| 1906. | | | | May 7 | do | [illegible] | [illegible] |
| Jan. 6 | W. V. Hardy | 3.62 | 2.7 | 13 | do | [illegible] | [illegible] |
| 23 | do | 3.79 | 9.3 | 27 | do | [illegible] | [illegible] |
| Feb. 4 | do | 3.68 | 4.8 | June 13 | do | [illegible] | [illegible] |
| 15 | do | 4.60 | 115 | July 7 | do | [illegible] | [illegible] |
| 16 | do | 4.50 | 96 | Nov. 16 | do | [illegible] | [illegible] |
| 16 | do | 4.40 | 75 | Dec. 8 | do | [illegible] | [illegible] |
| 16 | do | 4.30 | 62 | 19 | do | 3.21 | 1.4 |
| 16 | do | 4.20 | 51 | | | | |
| 16 | do | 4.10 | 46 | 1909. | | | |
| 17 | do | 4.00 | 32 | Jan. 26 | W. V. Hardy | 2.9 | [illegible] |
| 19 | do | 3.90 | 20 | Feb. 21 | do | 4.5 | [illegible] |
| Mar. 10 | do | 3.98 | 10.7 | 22 | do | 4.4 | 76 |
| Apr. 5 | do | 4.85 | 81 | 22 | do | 4.6 | 81 |
| 6 | do | 4.65 | 74 | Mar. 10 | do | [illegible] | [illegible] |
| 18 | do | 4.27 | 37 | 24 | do | [illegible] | [illegible] |
| 20 | do | 4.20 | 35 | Apr. 7 | do | 4.3 | [illegible] |
| May 8 | do | 4.05 | 24 | 20 | Hardy and Clapp | 4.1 | [illegible] |
| June 12 | C. H. Lee | 3.60 | 4.3 | 20 | do | 4.1 | [illegible] |
| Aug. 7 | R. S. Hawley | 3.16 | 1.1 | May 26 | W. V. Hardy | 3.75 | [illegible] |
| Oct. 9 | W. F. Martin | 3.15 | 1.1 | 28 | R. E. Haines | 3.64 | [illegible] |
| Nov. 28 | W. V. Hardy | 3.20 | 4.4 | | | | |
| Dec. 13 | do | 3.48 | 12.7 | 1910. | | | |
| | | | | Jan. 23 | W. V. Hardy | 4.20 | 32 |
| 1907. | | | | 27 | do | 4.10 | 22 |
| Jan. 4 | W. V. Hardy | 3.58 | 9.6 | Feb. 14 | do | 3.95 | 12 |
| 12 | do | 4.00 | 49 | 17 | do | 3.93 | 13 |
| 13 | do | 4.10 | 49 | Mar. 3 | do | 3.94 | 9.2 |
| Feb. 6 | do | 4.00 | 26 | 4 | do | 3.92 | [illegible] |
| 9 | do | 3.90 | 22 | 12 | do | 3.88 | [illegible] |
| 25 | do | 4.12 | 27 | 14 | do | 3.86 | [illegible] |
| 28 | do | 4.08 | 25 | Apr. 2 | do | 4.02 | [illegible] |
| Mar. 7 | do | 4.80 | 96 | 3 | do | 4.12 | 20 |
| 19 | do | 4.20 | 43 | 26 | do | 4.10 | [illegible] |
| Apr. 9 | do | 4.30 | 49 | May 7 | do | 4.06 | [illegible] |
| 26 | do | 4.10 | 26 | 24 | do | 3.98 | [illegible] |
| May 18 | do | 3.82 | 18 | 26 | do | 3.92 | [illegible] |
| 30 | do | 3.68 | 15 | June 4 | do | 3.84 | [illegible] |
| June 14 | do | 3.52 | 11 | 25 | do | 3.68 | [illegible] |
| 23 | do | 3.30 | 2.5 | Sept. 18 | C. C. Jacob | 3.50 | [illegible] |
| July 23 | W. A. Lamb | 3.30 | 2.5 | Nov. 16 | W. V. Hardy | 3.55 | 1.3 |
| Dec. 16 | W. V. Hardy | 3.29 | 4.7 | | | | |
| 31 | do | 3.27 | 3.3 | 1911. | | | |
| | | | | Feb. 9 | W. V. Hardy | 3.70 | 6.1 |
| 1908. | | | | Mar. 8 | do | 4.12 | 24 |
| Jan. 15 | W. V. Hardy | 3.41 | 5.9 | Apr. 17 | do | 3.85 | 4.6 |
| 26 | do | 3.50 | 10 | May 8 | do | 3.77 | [illegible] |
| 27 | do | 3.41 | 7.9 | Nov. 9 | F. C. Ebert | 3.58 | [illegible] |
| 28 | do | 3.60 | 13 | | | | |
| Feb. 11 | do | 3.50 | 12 | 1912. | | | |
| 11 | do | 3.52 | 12 | Jan. 16 | F. C. Ebert | 3.62 | [illegible] |
| 11 | do | 3.60 | 17 | Mar. 4 | do | 3.82 | [illegible] |
| 12 | do | 3.82 | 36 | 5 | do | 3.73 | [illegible] |
| 22 | do | 3.49 | 9.8 | 28 | do | 4.12 | 14 |
| 24 | do | 3.50 | 12 | 29 | do | 4.14 | 15 |
| Mar. 3 | do | 3.52 | 9.4 | May 6 | do | 4.12 | 9.1 |
| 4 | do | 3.73 | 18 | 7 | do | 4.12 | 10 |
| 11 | do | 3.50 | 9.1 | June 28 | do | 3.74 | [illegible] |
| 20 | do | 3.42 | 4.2 | 29 | do | 3.78 | [illegible] |

[a] Weir measurement. [b] Estimated.

*Daily gage height, in feet, of Sweetwater River near Descanso, Cal., for 1905–1912.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905-6. | | | | | | | | | | | |
| 1 | ........ | 3.69 | 3.7 | 3.65 | 4.0 | 4.8 | 4.2 | 3.9 | 3.45 | 3.2 | 3.3 |
| 2 | ........ | 3.64 | 3.65 | 3.65 | 3.95 | 4.7 | 4.15 | 3.85 | 3.4 | 3.2 | 3.3 |
| 3 | ........ | 3.61 | 3.7 | 3.65 | 3.9 | 4.7 | 4.1 | 3.85 | 3.4 | 3.2 | 3.3 |
| 4 | ........ | 3.60 | 3.7 | 3.7 | 4.0 | 4.6 | 4.1 | 3.85 | 3.4 | 3.2 | 3.3 |
| 5 | ........ | 3.60 | 3.65 | 3.85 | 3.95 | 4.7 | 4.2 | 3.85 | 3.4 | 3.2 | 3.3 |
| 6 | ........ | 3.58 | 3.65 | 3.95 | 3.9 | 4.7 | 4.15 | 3.85 | 3.4 | 3.2 | 3.3 |
| 7 | ........ | 3.58 | 3.6 | 3.9 | 3.85 | 4.65 | 4.15 | 3.8 | 3.4 | 3.2 | 3.3 |
| 8 | ........ | 3.58 | 3.6 | 3.8 | 3.85 | 4.6 | 4.1 | 3.8 | 3.4 | 3.2 | 3.3 |
| 9 | ........ | 3.58 | 3.6 | 3.8 | 3.85 | 4.6 | 4.25 | 3.75 | 3.4 | 3.2 | 3.3 |
| 10 | ........ | 3.64 | 3.6 | 3.85 | 3.85 | 4.5 | 4.0 | 3.7 | 3.4 | 3.15 | 3.25 |
| 11 | ........ | 3.68 | 3.6 | 3.95 | 3.9 | 4.45 | 4.0 | 3.7 | 3.35 | 3.15 | 3.25 |
| 12 | ........ | 3.69 | 3.6 | 3.9 | 4.95 | 4.4 | 4.1 | 3.7 | 3.35 | [a]3.15 | 3.25 |
| 13 | ........ | 3.65 | 3.65 | 3.9 | 5.05 | 4.4 | 4.0 | 3.7 | 3.35 | 3.15 | 3.25 |
| 14 | ........ | 3.60 | 3.75 | 3.9 | 4.5 | 4.35 | 4.0 | [a]3.65 | 3.4 | 3.15 | 3.3 |
| 15 | ........ | 3.60 | 3.7 | 4.45 | 4.4 | 4.35 | 3.95 | [a]3.65 | 3.4 | 3.15 | 3.65 |
| 16 | ........ | 3.60 | 3.7 | 4.2 | 4.65 | 4.3 | 3.9 | [a]3.6 | 3.35 | 3.15 | 3.45 |
| 17 | ........ | 3.60 | 3.65 | 4.1 | 5.05 | 4.3 | 3.9 | 3.6 | 3.35 | 3.3 | 3.25 |
| 18 | ........ | 3.67 | 3.65 | 3.95 | 4.65 | 4.25 | 3.9 | 3.6 | 3.3 | 3.6 | 3.2 |
| 19 | ........ | 3.66 | 4.05 | 3.9 | 4.5 | 4.25 | 3.9 | 3.6 | 3.3 | 3.6 | 3.15 |
| 20 | ........ | 3.66 | 4.15 | 3.85 | 4.4 | 4.2 | 3.9 | 3.6 | 3.3 | 3.5 | 3.15 |
| 21 | 3.53 | 3.78 | 3.9 | 3.95 | 4.35 | 4.2 | 3.9 | 3.55 | 3.3 | 3.45 | 3.15 |
| 22 | 3.54 | 3.70 | 3.85 | 4.0 | 4.45 | 4.15 | 3.85 | 3.55 | 3.3 | 3.4 | 3.1 |
| 23 | 3.54 | 3.62 | 3.8 | 3.95 | 4.35 | 4.1 | 3.9 | 3.55 | 3.3 | 3.4 | 3.1 |
| 24 | 3.54 | [a]3.62 | 3.75 | 3.9 | 7.35 | 4.15 | 3.9 | 3.55 | 3.3 | 3.45 | 3.15 |
| 25 | 3.53 | 3.64 | 3.75 | 3.85 | 6.8 | 4.15 | 3.9 | 3.5 | 3.35 | 3.35 | 3.15 |
| 26 | 3.54 | 3.65 | 3.75 | 3.85 | 6.6 | 4.1 | 4.05 | 3.55 | 3.35 | 3.35 | 3.15 |
| 27 | 3.84 | 3.65 | 3.7 | 3.85 | 5.6 | 4.1 | 4.0 | 3.6 | 3.3 | 3.35 | 3.1 |
| 28 | 3.84 | 3.65 | 3.7 | 3.95 | 5.2 | 4.4 | 4.2 | 3.55 | 3.25 | 3.35 | 3.1 |
| 29 | 3.71 | 3.69 | 3.7 | ........ | 4.85 | 4.4 | 4.0 | 3.5 | 3.25 | 3.35 | 3.15 |
| 30 | 3.70 | 3.66 | 3.7 | ........ | 4.7 | 4.25 | 3.95 | 3.45 | 3.2 | 3.35 | 3.2 |
| 31 | ........ | 3.72 | 3.7 | ........ | 4.7 | ........ | 3.9 | ........ | 3.2 | 3.3 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 1 | 3.15 | [a]3.2 | 3.2 | 3.55 | 4.1 | 4.05 | ........ | 4.0 | 3.65 | 3.38 | 3.26 | 3.24 |
| 2 | 3.15 | [a]3.2 | 3.25 | 3.6 | 4.1 | 4.0 | 4.35 | 4.0 | 3.65 | 3.38 | 3.26 | 3.24 |
| 3 | 3.15 | [a]3.2 | 3.25 | 3.55 | 4.1 | 4.0 | 4.8 | 4.0 | 3.6 | 3.38 | 3.26 | 3.24 |
| 4 | 3.15 | [a]3.2 | 3.3 | 3.6 | 4.05 | 4.05 | 4.4 | 4.0 | 3.6 | 3.38 | 3.26 | 3.24 |
| 5 | 3.1 | 3.2 | 3.25 | 3.6 | 4.0 | 5.1 | 4.4 | 4.05 | 3.65 | 3.36 | 3.26 | 3.24 |
| 6 | 3.1 | 3.2 | 3.25 | 3.75 | 4.0 | 4.85 | 4.3 | 4.05 | 3.7 | 3.35 | 3.26 | 3.24 |
| 7 | 3.1 | 3.2 | 3.2 | 3.8 | 3.95 | 4.8 | 4.3 | 4.0 | 3.7 | 3.35 | 3.28 | 3.24 |
| 8 | 3.1 | 3.2 | 3.2 | 3.8 | 3.9 | 4.85 | 4.3 | 3.95 | 3.7 | 3.35 | ........ | 3.23 |
| 9 | 3.1 | 3.2 | 3.2 | 3.9 | 3.95 | 4.7 | 4.3 | 3.95 | 3.65 | 3.36 | ........ | 3.23 |
| 10 | 3.1 | 3.15 | [a]3.2 | 4.9 | 3.9 | 4.65 | 4.3 | 3.95 | 3.6 | 3.38 | ........ | 3.23 |
| 11 | 3.1 | 3.15 | [a]3.4 | 4.15 | 3.85 | 4.65 | 4.25 | 4.0 | 3.55 | 3.38 | 3.25 | 3.23 |
| 12 | 3.1 | 3.15 | 3.9 | 4.0 | 3.85 | 4.6 | 4.25 | 3.95 | 3.6 | 3.37 | 3.25 | 3.23 |
| 13 | 3.1 | 3.15 | 3.45 | 4.1 | 3.85 | 4.5 | 4.2 | 3.9 | 3.65 | 3.37 | 3.25 | 3.23 |
| 14 | 3.1 | 3.2 | 3.3 | 4.45 | 3.85 | 4.45 | 4.2 | 3.9 | 3.55 | 3.37 | 3.25 | 3.23 |
| 15 | 3.1 | [a]3.2 | 3.2 | 4.25 | 3.85 | 4.4 | 4.2 | 3.9 | 3.5 | 3.37 | 3.25 | 3.23 |
| 16 | 3.1 | [a]3.15 | 3.2 | 4.1 | 4.5 | 4.4 | 4.2 | 3.85 | 3.45 | 3.37 | 3.24 | 3.23 |
| 17 | 3.15 | [a]3.15 | 3.2 | 4.2 | 4.1 | 4.25 | 4.2 | 3.85 | 3.45 | 3.37 | 3.24 | 3.23 |
| 18 | 3.15 | 3.15 | 3.2 | 5.05 | 4.1 | 4.2 | 4.2 | 3.8 | 3.45 | 3.37 | 3.24 | 3.23 |
| 19 | 3.15 | 3.15 | 3.2 | 4.8 | 4.05 | 4.2 | 4.15 | 3.8 | 3.45 | 3.36 | 3.24 | 3.23 |
| 20 | 3.15 | 3.15 | 3.2 | 4.8 | 4.1 | 4.3 | 4.1 | 3.8 | 3.45 | 3.32 | 3.24 | 3.23 |
| 21 | 3.15 | 3.15 | 3.2 | 4.7 | 4.1 | 4.4 | 4.05 | 3.75 | 3.45 | 3.32 | 3.24 | 3.23 |
| 22 | 3.15 | 3.4 | 3.2 | 4.7 | 4.4 | 4.3 | 4.05 | 3.75 | 3.45 | 3.3 | 3.22 | 3.23 |
| 23 | 3.2 | 3.45 | 3.2 | 4.6 | 4.2 | 4.25 | 4.05 | 3.75 | 3.45 | 3.28 | 3.22 | 3.23 |
| 24 | 3.2 | 3.35 | 3.2 | 4.5 | 4.15 | 4.3 | 4.1 | 3.75 | 3.45 | 3.28 | 3.22 | 3.23 |
| 25 | 3.2 | 3.3 | 3.2 | 4.35 | 4.15 | 4.65 | 4.1 | 3.75 | 3.4 | 3.28 | 3.22 | 3.23 |
| 26 | 3.2 | 3.3 | 3.45 | 4.2 | 4.1 | 4.9 | 4.1 | 3.75 | 3.4 | 3.29 | 3.22 | 3.23 |
| 27 | 3.2 | 3.35 | 3.7 | 4.1 | 4.1 | 4.95 | 4.05 | 3.75 | 3.4 | 3.29 | 3.23 | 3.23 |
| 28 | 3.25 | 3.2 | 4.5 | 4.1 | 4.05 | 4.55 | 4.05 | 3.75 | 3.4 | 3.29 | 3.24 | 3.23 |
| 29 | 3.25 | 3.2 | 3.8 | 4.1 | ........ | 4.5 | 4.05 | 3.7 | 3.4 | 3.28 | 3.24 | 3.23 |
| 30 | 3.2 | 3.2 | 3.5 | 4.5 | ........ | ........ | 4.0 | 3.7 | 3.4 | 3.28 | 3.24 | 3.23 |
| 31 | [a]3.2 | ........ | 3.5 | 4.25 | ........ | ........ | ........ | 3.7 | ........ | 3.27 | 3.24 | ........ |

[a] Estimated.

*Daily gage height, in feet, of Sweetwater River near Descanso, Cal., for 1905–1912*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 3.25 | 3.25 | 3.2 | 3.25 | 3.45 | 3.55 | 3.5 | 3.25 | 3.15 | 3.05 | 3.0 | 3.1 |
| 2 | 3.25 | 3.25 | 3.2 | 3.25 | 3.4 | 3.5 | 3.45 | 3.4 | 3.15 | ...... | 3.0 | ...... |
| 3 | 3.25 | 3.25 | 3.25 | 3.25 | 3.9 | 3.5 | 3.45 | 3.5 | 3.15 | ...... | 3.0 | ...... |
| 4 | 3.25 | 3.2 | 3.25 | 3.25 | 3.8 | 3.8 | 3.45 | 3.35 | 3.15 | ...... | 3.0 | ...... |
| 5 | 3.25 | 3.2 | 3.25 | 3.25 | 3.6 | 3.85 | 3.45 | 3.3 | 3.15 | ...... | 3.0 | ...... |
| 6 | 3.3 | 3.2 | 3.4 | 3.25 | 3.5 | 3.8 | 3.45 | 3.3 | 3.15 | ...... | ...... | 3.1 |
| 7 | 3.3 | 3.2 | 3.35 | 3.25 | 3.4 | 3.7 | 3.5 | 3.3 | 3.15 | 3.0 | ...... | ...... |
| 8 | 3.25 | 3.2 | 3.3 | 3.25 | 3.4 | 3.6 | 3.5 | 3.3 | 3.15 | 3.0 | ...... | ...... |
| 9 | 3.25 | 3.2 | 3.3 | 3.25 | 3.6 | 3.55 | 3.45 | 3.3 | 3.1 | 3.0 | ...... | ...... |
| 10 | 3.25 | 3.2 | 3.4 | 3.25 | 3.6 | 3.5 | 3.45 | 3.3 | 3.1 | 3.0 | 3.0 | 3.7 |
| 11 | 3.25 | 3.2 | 3.35 | 3.2 | 3.6 | 3.5 | 3.45 | 3.3 | 3.1 | 3.0 | ...... | ...... |
| 12 | 3.25 | 3.2 | 3.3 | 3.2 | 3.7 | 3.45 | 3.45 | 3.35 | 3.1 | 3.0 | ...... | ...... |
| 13 | 3.25 | 3.2 | 3.3 | 3.25 | 3.6 | 3.45 | 3.45 | 3.3 | 3.1 | 3.0 | ...... | ...... |
| 14 | 3.6 | 3.25 | 3.3 | 3.5 | 3.55 | 3.45 | 3.45 | 3.3 | 3.1 | 3.0 | ...... | ...... |
| 15 | 3.5 | 3.25 | 3.3 | 3.4 | 3.55 | 3.45 | 3.4 | 3.25 | 3.1 | 3.0 | ...... | ...... |
| 16 | 3.35 | 3.25 | 3.3 | 3.3 | 3.55 | 3.45 | 3.4 | 3.25 | 3.1 | 3.0 | ...... | ...... |
| 17 | 3.35 | 3.25 | 3.3 | 3.25 | 3.55 | 3.45 | 3.35 | 3.25 | 3.1 | 3.0 | 3.05 | ...... |
| 18 | 3.3 | 3.25 | 3.3 | 3.25 | 3.5 | 3.45 | 3.35 | 3.25 | 3.1 | 3.0 | ...... | ...... |
| 19 | 3.3 | 3.25 | 3.3 | 3.25 | 3.5 | 3.45 | 3.3 | 3.25 | 3.1 | 3.0 | ...... | ...... |
| 20 | 3.3 | 3.25 | 3.25 | 3.25 | 3.5 | 3.45 | 3.3 | 3.2 | 3.1 | 3.0 | ...... | ...... |
| 21 | 3.3 | 3.25 | 3.25 | 3.25 | 3.5 | 3.45 | 3.3 | 3.2 | 3.1 | 3.0 | ...... | ...... |
| 22 | 3.35 | 3.25 | 3.25 | 3.25 | 3.5 | 3.45 | 3.65 | 3.2 | 3.05 | 3.0 | ...... | ...... |
| 23 | 3.45 | 3.25 | 3.25 | 3.4 | 3.5 | 3.45 | 3.65 | 3.2 | 3.05 | 3.0 | ...... | 3.15 |
| 24 | 3.45 | 3.25 | 3.25 | 3.45 | 3.5 | 3.45 | 3.55 | 3.2 | 3.05 | 3.0 | 3.05 | 3.2 |
| 25 | 3.4 | 3.25 | 3.25 | 3.55 | ...... | 3.5 | 3.45 | 3.2 | 3.05 | 3.0 | ...... | ...... |
| 26 | 3.35 | 3.25 | 3.25 | 3.5 | ...... | 3.75 | 3.4 | 3.2 | 3.05 | 3.0 | ...... | ...... |
| 27 | 3.35 | 3.25 | 3.25 | 3.45 | 3.4 | 3.7 | 3.4 | 3.2 | 3.05 | 3.0 | ...... | ...... |
| 28 | 3.3 | 3.25 | 3.3 | 3.6 | 3.45 | 3.6 | 3.3 | 3.15 | 3.05 | 3.0 | ...... | ...... |
| 29 | 3.3 | 3.25 | 3.3 | 3.55 | 3.6 | 3.6 | 3.25 | 3.15 | 3.05 | 3.0 | ...... | ...... |
| 30 | 3.25 | 3.2 | 3.3 | 3.45 | ...... | 3.56 | 3.25 | 3.15 | 3.05 | 3.0 | ...... | ...... |
| 31 | 3.25 | ...... | 3.3 | 3.45 | ...... | 3.5 | ...... | 3.15 | ...... | 3.0 | 3.1 | ...... |
| 1908–9. | | | | | | | | | | | | |
| 1 | 3.1 | 3.1 | 3.1 | 3.15 | 3.85 | 3.3 | 4.6 | 3.8 | 3.75 | 3.5 | 3.45 | 3.5 |
| 2 | 3.1 | 3.1 | 3.15 | 3.2 | 3.8 | 3.25 | 4.5 | 3.8 | 3.75 | 3.45 | 3.45 | 3.5 |
| 3 | 3.1 | 3.1 | 3.2 | 3.2 | 3.95 | 3.2 | 4.45 | 3.8 | 3.75 | 3.45 | 3.45 | 3.5 |
| 4 | 3.1 | 3.1 | 3.2 | 3.2 | 4.1 | 3.2 | 4.4 | 3.8 | 3.7 | 3.45 | 3.45 | 3.5 |
| 5 | 3.1 | 3.1 | ...... | 3.2 | 4.0 | 3.15 | 4.4 | 3.8 | 3.7 | 3.45 | 3.45 | 3.55 |
| 6 | 3.1 | 3.1 | ...... | 3.2 | 3.95 | 3.1 | 4.3 | 3.8 | 3.7 | 3.45 | 3.7 | 3.6 |
| 7 | 3.1 | 3.1 | ...... | 3.2 | 3.95 | 3.4 | 4.2 | 3.8 | 3.7 | 3.45 | 3.6 | 3.5 |
| 8 | 3.1 | 3.1 | 3.2 | 3.2 | 4.65 | 3.5 | 4.2 | 3.8 | 3.7 | 3.45 | 3.6 | 3.5 |
| 9 | 3.1 | 3.1 | 3.2 | 3.25 | 4.4 | 3.5 | 4.2 | 3.8 | 3.7 | 3.45 | 3.5 | 3.5 |
| 10 | 3.1 | 3.1 | 3.2 | 3.3 | 4.35 | 4.1 | 4.15 | 3.8 | 3.7 | 3.45 | 3.5 | 3.5 |
| 11 | 3.1 | 3.1 | 3.2 | 3.25 | 4.75 | 4.05 | 4.15 | 3.8 | 3.65 | 3.45 | 3.5 | 3.5 |
| 12 | 3.1 | 3.1 | 3.2 | 3.35 | 4.95 | 4.05 | 4.15 | 3.8 | 3.65 | 3.45 | 3.45 | 3.5 |
| 13 | 3.1 | 3.1 | 3.2 | 3.75 | 5.05 | 4.05 | 4.1 | 3.8 | 3.65 | 3.45 | 3.45 | 3.5 |
| 14 | 3.1 | 3.1 | 3.2 | 3.95 | 4.7 | 4.0 | 4.1 | 3.8 | 3.6 | 3.45 | 3.7 | 3.5 |
| 15 | 3.15 | 3.1 | 3.2 | 3.5 | 4.6 | 4.0 | 4.1 | 3.8 | 3.6 | 3.45 | 3.65 | 3.5 |
| 16 | 3.2 | 3.1 | 3.25 | 3.4 | 4.5 | 4.0 | 4.1 | 3.8 | 3.6 | 3.45 | 3.65 | 3.45 |
| 17 | 3.15 | 3.1 | 3.25 | 3.4 | 4.4 | 4.0 | 4.1 | 3.8 | 3.6 | 3.45 | 3.6 | 3.45 |
| 18 | 3.15 | 3.1 | 3.2 | 3.35 | 4.35 | 4.0 | 4.1 | 3.8 | 3.6 | 3.45 | 3.6 | 3.45 |
| 19 | 3.15 | 3.1 | 3.2 | 3.3 | 4.3 | 4.0 | 4.1 | 3.8 | 3.6 | 3.45 | 3.5 | 3.45 |
| 20 | 3.1 | 3.1 | 3.2 | 3.3 | 4.25 | 4.0 | 4.1 | 3.8 | 3.6 | 3.45 | 3.5 | 3.45 |
| 21 | 3.1 | 3.1 | 3.2 | 3.8 | 4.9 | 4.0 | 4.1 | 3.8 | 3.6 | 3.45 | 3.5 | 3.45 |
| 22 | 3.1 | ...... | 3.2 | 6.25 | 4.5 | 4.2 | 4.05 | 3.8 | 3.6 | 3.5 | 3.5 | 3.4 |
| 23 | 3.1 | ...... | 3.2 | 4.0 | 4.2 | 4.25 | 4.0 | 3.8 | 3.55 | 3.5 | 3.5 | 3.4 |
| 24 | 3.1 | ...... | 3.2 | 3.9 | 3.9 | 4.2 | 4.0 | 3.8 | 3.55 | 3.45 | 3.45 | 3.4 |
| 25 | 3.1 | ...... | 3.2 | 3.95 | 3.6 | 4.25 | 4.0 | 3.8 | 3.55 | 3.45 | 3.45 | 3.4 |
| 26 | 3.1 | 3.15 | 3.2 | 3.9 | 3.35 | 4.5 | 3.95 | 3.8 | 3.55 | 3.45 | 3.45 | 3.4 |
| 27 | 3.1 | 3.15 | 3.2 | 4.1 | 3.3 | 5.0 | 3.95 | 3.8 | 3.55 | 3.45 | 3.4 | 3.4 |
| 28 | 3.1 | 3.15 | 3.2 | 4.0 | 3.3 | 4.8 | 3.95 | 3.8 | 3.55 | 3.45 | 3.4 | 3.4 |
| 29 | 3.1 | 3.15 | 3.2 | 3.9 | ...... | 4.75 | 3.9 | 3.75 | 3.5 | 3.45 | 3.45 | 3.4 |
| 30 | 3.1 | 3.1 | 3.2 | 3.9 | ...... | 4.7 | 3.85 | 3.75 | 3.5 | 3.45 | 3.7 | 3.4 |
| 31 | 3.1 | ...... | 3.2 | 3.85 | ...... | 4.7 | ...... | 3.75 | ...... | 3.45 | 3.6 | ...... |

*Daily gage height, in feet, of Sweetwater River near Descanso, Cal., for 1905–1912*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 3.4 | 3.45 | 3.6 | 6.05 | 4.08 | ....... | 4.17 | 4.11 | 3.82 | 3.64 | ....... | 3.53 |
| 2 | 3.4 | 3.45 | 3.55 | 4.75 | 4.08 | ....... | 4.12 | 4.11 | 3.81 | 3.64 | ....... | 3.53 |
| 3 | 3.4 | 3.45 | 3.55 | 4.85 | 4.02 | 3.94 | 4.12 | 4.14 | 3.81 | 3.64 | ....... | 3.53 |
| 4 | 3.4 | 3.45 | 3.55 | 4.6 | 4.0 | 3.94 | 4.1 | 4.13 | 3.81 | 3.64 | ....... | 3.53 |
| 5 | 3.4 | 3.45 | 3.6 | 4.54 | 4.0 | ....... | 4.08 | 4.13 | 3.79 | 3.64 | ....... | 3.52 |
| 6 | 3.45 | 3.45 | 3.6 | 4.39 | 4.0 | 3.91 | 4.06 | 4.11 | 3.79 | 3.64 | ....... | 3.51 |
| 7 | 3.45 | 3.45 | 3.6 | 4.32 | 4.0 | 3.91 | 4.06 | 4.11 | 3.78 | 3.64 | ....... | 3.51 |
| 8 | 3.45 | 3.5 | 3.6 | 4.25 | 4.0 | 3.91 | 4.06 | 4.09 | 3.78 | 3.64 | ....... | 3.51 |
| 9 | 3.45 | 3.55 | 4.6 | 4.2 | 3.99 | 3.91 | 4.06 | 4.07 | 3.77 | 3.64 | ....... | 3.51 |
| 10 | 3.45 | 3.6 | 4.1 | 4.2 | 3.99 | 3.91 | 4.04 | 4.04 | 3.76 | 3.64 | ....... | 3.51 |
| 11 | 3.45 | 3.6 | 3.6 | 4.19 | 3.98 | 3.9 | 4.11 | 4.02 | 3.76 | 3.64 | ....... | 3.5 |
| 12 | 3.45 | 3.6 | 3.6 | 4.16 | 3.97 | 3.89 | 4.21 | 4.0 | 3.75 | 3.64 | ....... | 3.5 |
| 13 | 3.45 | 3.6 | 3.6 | 4.15 | 3.97 | 3.88 | 4.14 | 4.0 | 3.74 | 3.67 | ....... | 3.52 |
| 14 | 3.45 | 3.75 | 3.6 | 4.15 | 3.96 | 3.92 | 4.09 | 4.0 | 3.72 | 3.66 | 3.54 | 3.55 |
| 15 | 3.5 | 3.9 | 3.6 | 4.4 | 3.96 | 3.92 | 4.06 | 4.0 | 3.71 | 3.64 | 3.54 | 3.52 |
| 16 | 3.5 | 3.7 | 3.6 | 4.95 | 3.94 | 3.9 | 4.01 | 4.0 | 3.7 | 3.64 | 3.54 | 3.5 |
| 17 | 3.45 | 3.6 | 3.55 | 4.6 | 3.94 | 3.93 | 3.99 | 4.0 | 3.7 | 3.64 | 3.54 | 3.59 |
| 18 | 3.45 | 3.55 | 3.5 | 4.58 | 3.92 | 3.94 | 3.97 | 4.0 | 3.7 | 3.64 | 3.54 | 3.59 |
| 19 | 3.45 | 3.55 | 3.4 | 4.52 | 4.02 | 3.91 | 3.95 | 4.0 | 3.69 | 3.64 | 3.54 | 3.59 |
| 20 | 3.45 | 3.5 | 3.8 | 4.45 | 4.15 | 3.88 | 3.97 | 3.99 | 3.68 | 3.62 | 3.54 | 3.59 |
| 21 | 3.45 | 3.5 | 4.35 | 4.35 | 4.0 | 3.84 | 3.99 | 3.97 | 3.68 | 3.62 | 3.54 | 3.59 |
| 22 | 3.45 | 3.5 | 3.95 | 4.2 | 3.93 | 3.91 | 3.98 | 3.96 | 3.68 | 3.62 | 3.54 | 3.59 |
| 23 | 3.45 | 3.5 | 3.85 | 4.2 | 3.92 | 3.94 | 3.96 | 3.95 | 3.68 | 3.62 | 3.54 | 3.59 |
| 24 | 3.45 | 3.5 | 3.8 | 4.18 | 3.92 | 3.86 | 3.95 | 3.94 | 3.68 | 3.61 | 3.54 | 3.59 |
| 25 | 3.45 | 3.5 | 3.8 | 4.12 | 3.93 | 4.04 | 3.97 | 3.92 | 3.67 | 3.61 | 3.54 | 3.59 |
| 26 | 3.45 | 3.9 | 3.8 | 4.1 | 3.93 | 4.12 | 3.99 | 3.92 | 3.66 | 3.61 | 3.54 | 3.59 |
| 27 | 3.45 | 3.8 | 3.75 | 4.1 | 3.93 | 4.12 | 4.01 | 3.88 | 3.66 | 3.60 | 3.54 | 3.59 |
| 28 | 3.45 | 3.7 | 3.75 | 4.09 | 3.93 | 4.35 | 4.01 | 3.87 | 3.66 | 3.62 | 3.53 | 3.57 |
| 29 | 3.45 | 3.65 | 3.75 | 4.06 | ....... | 4.22 | 4.09 | 3.86 | 3.66 | 3.62 | 3.53 | 3.55 |
| 30 | 3.45 | 3.6 | 3.75 | 4.04 | ....... | 4.2 | 4.11 | 3.84 | 3.66 | 3.62 | 3.53 | 3.54 |
| 31 | 3.45 | ....... | 3.9 | 4.02 | ....... | 4.18 | ....... | 3.82 | ....... | 3.62 | 3.53 | ....... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 3.52 | 3.56 | 3.48 | 3.48 | 4.50 | 3.96 | 4.06 | ....... | 3.64 | 3.51 | 3.54 | 3.52 |
| 2 | 3.52 | 3.56 | 3.48 | 3.48 | 4.15 | 3.98 | 4.14 | ....... | 3.62 | 3.51 | 3.54 | 3.52 |
| 3 | 3.51 | 3.6 | 3.48 | 3.48 | 4.28 | 4.10 | 4.07 | ....... | 3.62 | 3.51 | 3.53 | 3.52 |
| 4 | 3.51 | 3.54 | 3.48 | 3.47 | 4.85 | 4.85 | 4.04 | ....... | 3.61 | 3.51 | 3.52 | 3.52 |
| 5 | 3.51 | 3.54 | 3.48 | 3.47 | 4.85 | 4.48 | 4.02 | ....... | 3.61 | 3.51 | 3.52 | 3.52 |
| 6 | 3.51 | 3.52 | 3.48 | 3.47 | 4.85 | 4.12 | 4.02 | ....... | 3.60 | 3.52 | 3.52 | 3.52 |
| 7 | 3.51 | 3.52 | 3.48 | 3.46 | 4.85 | 4.08 | 4.10 | ....... | 3.60 | 3.52 | 3.52 | 3.52 |
| 8 | 3.51 | 3.52 | 3.48 | 3.47 | 3.72 | 4.08 | 4.06 | ....... | 3.60 | 3.52 | 3.52 | 3.52 |
| 9 | 3.51 | 3.52 | 3.48 | 3.48 | 3.70 | 4.08 | 3.96 | 3.71 | 3.60 | 3.53 | 3.52 | 3.52 |
| 10 | 3.51 | 3.52 | 3.49 | 4.15 | 3.70 | 4.38 | 3.92 | 3.71 | 3.60 | 3.54 | 3.52 | 3.52 |
| 11 | 3.51 | ....... | 3.5 | 4.88 | 3.85 | 4.29 | 3.92 | 3.71 | 3.59 | 3.54 | 3.52 | 3.50 |
| 12 | 3.51 | ....... | 3.5 | 3.77 | 3.95 | 4.25 | 3.91 | 3.71 | 3.59 | 3.54 | 3.52 | 3.50 |
| 13 | 3.52 | ....... | 3.49 | 3.71 | 3.98 | 4.18 | 3.89 | 3.71 | 3.58 | 3.54 | 3.52 | 3.50 |
| 14 | 3.58 | ....... | 3.5 | 3.7 | 4.28 | 4.02 | 3.88 | 3.71 | 3.57 | 3.54 | 3.52 | 3.50 |
| 15 | 3.72 | ....... | 3.5 | 3.74 | 4.08 | 3.98 | 3.88 | 3.71 | 3.55 | 3.54 | 3.52 | 3.50 |
| 16 | 3.68 | 3.55 | 3.5 | 3.71 | 3.86 | 3.98 | 3.88 | 3.71 | 3.54 | 3.54 | 3.52 | 3.50 |
| 17 | 3.67 | 3.52 | 3.5 | 3.64 | 3.91 | 3.98 | 3.86 | 3.71 | 3.54 | 3.54 | 3.52 | 3.50 |
| 18 | 3.59 | 3.52 | 3.5 | 3.61 | 3.89 | 3.98 | 3.86 | 3.71 | 3.53 | 3.54 | 3.52 | 3.50 |
| 19 | 3.56 | 3.52 | 3.54 | 3.59 | 3.86 | 3.97 | 3.86 | 3.71 | 3.52 | 3.54 | 3.51 | 3.50 |
| 20 | 3.55 | 3.52 | 3.64 | 3.56 | 3.82 | 3.98 | 3.86 | 3.64 | 3.51 | 3.54 | 3.51 | 3.50 |
| 21 | 3.54 | 3.52 | 3.6 | 3.54 | 3.8 | 4.00 | 3.86 | 3.64 | 3.51 | 3.54 | 3.51 | 3.50 |
| 22 | 3.54 | 3.52 | 3.56 | 3.51 | 3.79 | 4.06 | 3.86 | 3.62 | 3.51 | 3.54 | 3.51 | 3.52 |
| 23 | 3.54 | 3.5 | 3.52 | 3.50 | 3.77 | 4.06 | 3.84 | 3.64 | 3.51 | 3.54 | 3.51 | 3.52 |
| 24 | 3.54 | 3.5 | 3.5 | 3.48 | 3.78 | 4.00 | 3.82 | 3.65 | 3.51 | 3.54 | 3.51 | 3.52 |
| 25 | 3.54 | 3.5 | 3.52 | 3.67 | 3.85 | 3.99 | 3.82 | 3.66 | 3.51 | 3.54 | 3.51 | 3.52 |
| 26 | 3.54 | 3.5 | 3.53 | 3.62 | 3.95 | 3.99 | 3.85 | 3.66 | 3.51 | 3.54 | 3.51 | 3.52 |
| 27 | 3.54 | 3.5 | 3.51 | 3.58 | 3.95 | 3.98 | 3.87 | 3.69 | 3.51 | 3.60 | 3.51 | 3.52 |
| 28 | 3.54 | 3.5 | 3.5 | 3.60 | 3.15 | 3.97 | 3.86 | 3.69 | 3.51 | 3.60 | 3.51 | 3.52 |
| 29 | 3.56 | 3.5 | 3.49 | 3.59 | ....... | 3.97 | 3.86 | 3.68 | 3.51 | 3.54 | 3.51 | 3.53 |
| 30 | 3.56 | 3.5 | 3.49 | 3.58 | ....... | 3.96 | 3.85 | 3.67 | 3.51 | 3.54 | 3.51 | 3.56 |
| 31 | 3.56 | ....... | 3.48 | 3.58 | ....... | 3.94 | ....... | 3.66 | ....... | 3.54 | 3.51 | ....... |

*Daily gage height, in feet, of Sweetwater River near Descanso, Cal., for 1905–1912*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 3.54 | 3.38 | 3.40 | 3.45 | 3.4 | 3.7 | 4.25 | 4.15 | 3.95 |
| 2 | 3.52 | 3.38 | 3.40 | 3.45 | 3.4 | 4.8 | 4.2 | 4.15 | 3.95 |
| 3 | 3.52 | 3.38 | 3.40 | 3.45 | 3.4 | 3.9 | 4.1 | 4.1 | 4.0 |
| 4 | 3.53 | 3.38 | 3.40 | 3.45 | 3.4 | 3.6 | 4.1 | 4.1 | 3.95 |
| 5 | 3.53 | 3.38 | 3.40 | 3.4 | 3.4 | 4.1 | 4.1 | 4.1 | 3.95 |
| 6 | 3.54 | 3.38 | 3.45 | 3.4 | 3.4 | 4.4 | 4.0 | 4.1 | 3.95 |
| 7 | 3.54 | 3.38 | 3.40 | 3.6 | 3.4 | 4.3 | 3.95 | 4.1 | 3.9 |
| 8 | 3.54 | 3.38 | 3.45 | 3.6 | 3.6 | 5.25 | 4.0 | 4.3 | 3.9 |
| 9 | 3.54 | 3.38 | 3.44 | 3.45 | 3.6 | 5.2 | 4.05 | 4.4 | 3.9 |
| 10 | 3.54 | 3.38 | 3.42 | 3.45 | 3.4 | 4.2 | 4.15 | 4.2 | 3.9 |
| 11 | 3.54 | 3.38 | 3.42 | 3.45 | 3.4 | 4.25 | 4.3 | 4.15 | 3.9 |
| 12 | 3.54 | 3.38 | 3.42 | 3.4 | 3.5 | 4.1 | 4.6 | 4.15 | 3.9 |
| 13 | 3.54 | 3.40 | 3.42 | 3.6 | 3.6 | 4.1 | 4.55 | 4.1 | 3.85 |
| 14 | 3.54 | 3.40 | 3.42 | 3.6 | 3.4 | 4.2 | 4.7 | 4.05 | 3.85 |
| 15 | 3.54 | 3.40 | 3.42 | 3.4 | 3.5 | 4.1 | 4.6 | 4.0 | 3.85 |
| 16 | 3.54 | 3.40 | 3.42 | 3.6 | 3.4 | 4.0 | 4.6 | 4.0 | 3.85 |
| 17 | 3.54 | 3.40 | 3.48 | 3.6 | 3.6 | 3.95 | 4.55 | 4.0 | 3.85 |
| 18 | 3.54 | 3.40 | 3.46 | 3.6 | 3.6 | 3.95 | 4.5 | 4.05 | 3.85 |
| 19 | 3.54 | 3.40 | 3.44 | 3.6 | 3.6 | 3.95 | 4.45 | 4.05 | 3.8 |
| 20 | 3.54 | 3.40 | 3.44 | 3.6 | 3.6 | 4.1 | 4.4 | 4.05 | 3.8 |
| 21 | 3.54 | 3.40 | 3.44 | 3.5 | 3.6 | 4.05 | 4.3 | 4.05 | 3.8 |
| 22 | 3.54 | 3.40 | 3.54 | 3.6 | 3.6 | 4.1 | 4.25 | 4.05 | 3.8 |
| 23 | 3.54 | 3.40 | 3.54 | 3.5 | 3.6 | 4.1 | 4.2 | 4.05 | 3.8 |
| 24 | 3.54 | 3.40 | 3.54 | 3.5 | 3.6 | 4.0 | 4.2 | 4.05 | 3.8 |
| 25 | 3.54 | 3.40 | 3.48 | 3.6 | 3.6 | 3.95 | 4.2 | 4.05 | 3.8 |
| 26 | 3.54 | 3.40 | 3.46 | 3.5 | 3.6 | 4.3 | 4.15 | 4.05 | 3.8 |
| 27 | 3.42 | 3.50 | 3.45 | 3.65 | 3.6 | 4.2 | 4.15 | 4.05 | 3.8 |
| 28 | 3.50 | 3.50 | 3.70 | 3.6 | 3.6 | 4.15 | 4.15 | 4.05 | 3.8 |
| 29 | 3.50 | 3.50 | 3.75 | 3.5 | 3.6 | 4.15 | 4.15 | 4.05 | 3.8 |
| 30 | 3.60 | 3.50 | 3.72 | 3.6 | ........ | 4.3 | 4.15 | 4.05 | 3.75 |
| 31 | 3.58 | ........ | 3.65 | 3.6 | ........ | 4.3 | ........ | 4.0 | ........ |

*Daily discharge, in second-feet, of Sweetwater River near Descanso, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 1.1 | 13 | 1.9 | 91 | 11 | 9.5 | 4.4 | 3.8 | 4.4 |
| 2 | 1.4 | 11 | 1.7 | 75 | 11 | 9.5 | 3.5 | 3.5 | 4.4 |
| 3 | 1.4 | 13 | 1.4 | 68 | 11 | 9.5 | 3.8 | 3.8 | 4.4 |
| 4 | 1.4 | 20 | 1.4 | 61 | 11 | 8.0 | 3.8 | 3.8 | 4.4 |
| 5 | 1.4 | 21 | 1.1 | 61 | 11 | 8.0 | 3.8 | 3.8 | 5.2 |
| 6 | 1.4 | 18 | .8 | 40 | 11 | 8.0 | 3.8 | 8.0 | 6.0 |
| 7 | 1.4 | 18 | 3.2 | 30 | 11 | 8.0 | 3.8 | 6.0 | 4.4 |
| 8 | 1.4 | 100 | 4.4 | 30 | 11 | 8.0 | 3.8 | 6.0 | 4.4 |
| 9 | 1.8 | 61 | 4.4 | 30 | 11 | 8.0 | 3.8 | 4.4 | 4.4 |
| 10 | 2.2 | 55 | 30 | 34 | 11 | 8.0 | 3.8 | 4.4 | 4.4 |
| 11 | 1.8 | 117 | 25 | 34 | 11 | 7.0 | 3.8 | 4.4 | 4.4 |
| 12 | 2.7 | 156 | 25 | 34 | 11 | 7.0 | 3.8 | 3.8 | 4.4 |
| 13 | 9.5 | 177 | 25 | 29 | 11 | 7.0 | 3.8 | 3.8 | 4.4 |
| 14 | 18 | 106 | 21 | 29 | 11 | 6.0 | 3.8 | 8.0 | 4.4 |
| 15 | 4.4 | 91 | 21 | 29 | 11 | 6.0 | 3.8 | 7.0 | 4.4 |
| 16 | 2.2 | 75 | 21 | 29 | 11 | 6.0 | 3.8 | 7.0 | 3.8 |
| 17 | 3.2 | 61 | 21 | 30 | 11 | 6.0 | 3.8 | 6.0 | 3.8 |
| 18 | 2.7 | 55 | 21 | 30 | 11 | 6.0 | 3.8 | 6.0 | 3.5 |
| 19 | 2.2 | 40 | 21 | 30 | 11 | 6.0 | 3.8 | 4.4 | 3.5 |
| 20 | 2.2 | 44 | 21 | 30 | 11 | 6.0 | 3.8 | 4.4 | 3.8 |
| 21 | 11 | 145 | 21 | 30 | 11 | 6.0 | 3.8 | 4.4 | 3.5 |
| 22 | 506 | 115 | 30 | 25 | 11 | 6.0 | 4.4 | 4.4 | 3.2 |
| 23 | 21 | 80 | 44 | 21 | 11 | 5.2 | 4.4 | 4.4 | 3.2 |
| 24 | 16 | 60 | 30 | 21 | 11 | 5.2 | 3.8 | 3.8 | 3.2 |
| 25 | 18 | 31 | 44 | 21 | 11 | 5.2 | 3.8 | 3.8 | 3.2 |
| 26 | 16 | 2.7 | 75 | 18 | 11 | 5.2 | 3.8 | 3.8 | 3.2 |
| 27 | 20 | 2.2 | 166 | 18 | 11 | 5.2 | 3.8 | 3.2 | 3.2 |
| 28 | 21 | 2.2 | 126 | 18 | 11 | 5.2 | 3.8 | 3.2 | 3.2 |
| 29 | 15 | ........ | 117 | 15 | 9.5 | 4.4 | 3.8 | 3.8 | 3.2 |
| 30 | 15 | ........ | 108 | 13 | 9.5 | 4.4 | 3.8 | 8.0 | 3.2 |
| 31 | 13 | ........ | 108 | ........ | 9.5 | ........ | 3.8 | 6.0 | ........ |

*Daily discharge, in second-feet, of Sweetwater River near Descanso, Cal., for 1909-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | 3.2 | 3.8 | 6.0 | 479 | 19 | 10 | 25 | 6.0 | 2.3 | 0.7 | 0.4 | 0.1 |
| 2 | 3.2 | 3.8 | 5.2 | 116 | 19 | 10 | 20 | 6.0 | 2.2 | .7 | .4 | .1 |
| 3 | 3.2 | 3.8 | 5.2 | 138 | 16 | 10 | 20 | 7.0 | 2.2 | .7 | .4 | .1 |
| 4 | 3.2 | 3.8 | 5.2 | 88 | 15 | 10 | 19 | 7.0 | 2.2 | .7 | .4 | .1 |
| 5 | 3.2 | 3.8 | 6.0 | 78 | 15 | 9.0 | 17 | 7.0 | 2.0 | .7 | .4 | .1 |
| 6 | 3.8 | 3.8 | 6.0 | 56 | 15 | 8.0 | 16 | 6.0 | 2.0 | .7 | .4 | .05 |
| 7 | 3.8 | 3.8 | 6.0 | 47 | 15 | 8.0 | 15 | 6.0 | 1.9 | .7 | .3 | .05 |
| 8 | 3.8 | 4.4 | 6.0 | 38 | 15 | 8.0 | 15 | 6.0 | 1.9 | .7 | .3 | .05 |
| 9 | 3.8 | 5.2 | 91 | 32 | 14 | 8.0 | 14 | 6.0 | 1.8 | .7 | .3 | .05 |
| 10 | 3.8 | 6.0 | 29 | 32 | 14 | 8.0 | 13 | 5.0 | 1.7 | .7 | .3 | .05 |
| 11 | 3.8 | 6.0 | 6.0 | 31 | 14 | 8.0 | 15 | 4.9 | 1.7 | .7 | .3 | .0 |
| 12 | 3.8 | 6.0 | 6.0 | 27 | 13 | 7.0 | 19 | 4.6 | 1.6 | .7 | .3 | .0 |
| 13 | 3.8 | 6.0 | 6.0 | 26 | 13 | 7.0 | 15 | 4.6 | 1.5 | .9 | .3 | .1 |
| 14 | 3.8 | 9.5 | 6.0 | 26 | 13 | 8.0 | 13 | 4.6 | 1.3 | .8 | .2 | .2 |
| 15 | 4.4 | 15 | 6.0 | 57 | 13 | 9.0 | 11 | 4.6 | 1.2 | .7 | .2 | .1 |
| 16 | 4.4 | 8.0 | 6.0 | 160 | 13 | 9.0 | 9.0 | 4.6 | 1.1 | .7 | .2 | .0 |
| 17 | 3.8 | 6.0 | 5.2 | 88 | 13 | 10 | 9.0 | 4.6 | 1.1 | .7 | .2 | .4 |
| 18 | 3.8 | 5.2 | 4.4 | 85 | 12 | 11 | 9.0 | 4.6 | 1.1 | .7 | .2 | .4 |
| 19 | 3.8 | 5.2 | 3.2 | 75 | 16 | 10 | 8.0 | 4.6 | 1.0 | .7 | .2 | .4 |
| 20 | 3.8 | 4.4 | 11 | 64 | 22 | 10 | 8.0 | 4.5 | 1.0 | .5 | .2 | .4 |
| 21 | 3.8 | 4.4 | 55 | 50 | 14 | 9.0 | 7.0 | 4.2 | 1.0 | .5 | .2 | .4 |
| 22 | 3.8 | 4.4 | 18 | 32 | 12 | 11 | 7.0 | 4.0 | 1.0 | .5 | .2 | .4 |
| 23 | 3.8 | 4.4 | 13 | 32 | 11 | 12 | 6.0 | 3.9 | 1.0 | .5 | .2 | .4 |
| 24 | 3.8 | 4.4 | 11 | 30 | 11 | 10 | 6.0 | 3.8 | 1.0 | .5 | .2 | .4 |
| 25 | 3.8 | 4.4 | 11 | 22 | 11 | 17 | 5.0 | 3.5 | .9 | .5 | .2 | .4 |
| 26 | 3.8 | 15 | 11 | 20 | 11 | 21 | 5.0 | 3.5 | .8 | .5 | .2 | .4 |
| 27 | 3.8 | 11 | 9.5 | 20 | 11 | 21 | 5.0 | 3.0 | .8 | .4 | .2 | .4 |
| 28 | 3.8 | 8.0 | 9.5 | 19 | 10 | 39 | 5.0 | 2.9 | .8 | .5 | .1 | .3 |
| 29 | 3.8 | 7.0 | 9.5 | 18 | ...... | 28 | 6.0 | 2.8 | .8 | .5 | .1 | .2 |
| 30 | 3.8 | 6.0 | 9.5 | 17 | ...... | 27 | 6.0 | 2.5 | .8 | .5 | .1 | .2 |
| 31 | 3.8 | ...... | 15 | 16 | ...... | 26 | ...... | 2.3 | ...... | .5 | .1 | ...... |
| 1910-11. | | | | | | | | | | | | |
| 1 | 0.1 | 1.5 | 2.0 | 0.3 | 107 | 16 | 18 | 4.2 | 1.1 | 0.4 | 0.6 | 0.5 |
| 2 | .1 | 1.5 | 2.0 | .3 | 50 | 17 | 26 | 3.8 | .9 | .4 | .6 | .5 |
| 3 | .05 | 2.0 | 2.0 | .3 | 69 | 26 | 19 | 3.4 | .9 | .4 | .5 | .5 |
| 4 | .05 | 1.5 | 2.0 | .2 | 182 | 146 | 17 | 3.1 | .9 | .4 | .5 | .5 |
| 5 | .05 | 1.5 | 2.0 | .2 | 182 | 76 | 14 | 2.8 | .9 | .4 | .5 | .5 |
| 6 | .05 | 1.0 | 2.0 | .2 | 182 | 28 | 14 | 2.5 | .8 | .5 | .5 | .5 |
| 7 | .05 | 1.0 | 2.0 | .2 | 182 | 23 | 22 | 2.2 | .8 | .5 | .5 | .5 |
| 8 | .05 | 1.0 | 2.0 | .2 | 8.0 | 20 | 17 | 1.9 | .8 | .5 | .5 | .5 |
| 9 | .05 | 1.0 | 2.0 | .3 | 6.0 | 20 | 10 | 1.6 | .8 | .5 | .5 | .5 |
| 10 | .05 | 1.0 | 2.0 | 31 | 6.0 | 56 | 7.7 | 1.6 | .8 | .6 | .5 | .5 |
| 11 | .05 | 1.0 | 2.5 | 168 | 16 | 43 | 7.7 | 1.6 | .8 | .6 | .5 | .4 |
| 12 | .05 | 3.0 | 2.5 | 5 | 26 | 38 | 7.1 | 1.6 | .8 | .6 | .5 | .4 |
| 13 | .1 | 2.0 | 2.5 | 3.7 | 29 | 30 | 6.1 | 1.6 | .7 | .6 | .5 | .4 |
| 14 | .3 | 4.0 | 2.5 | 3.0 | 68 | 14 | 5.7 | 1.6 | .7 | .6 | .5 | .4 |
| 15 | 3.0 | 3.0 | 2.5 | 4.0 | 41 | 11 | 5.7 | 1.6 | .6 | .6 | .5 | .4 |
| 16 | 2.5 | 1.3 | 2.5 | 3.7 | 14 | 11 | 5.7 | 1.6 | .6 | .6 | .5 | .4 |
| 17 | 2.0 | 1.0 | 2.5 | 2.0 | 18 | 11 | 5.0 | 1.6 | .6 | .6 | .5 | .4 |
| 18 | 1.5 | 1.0 | 2.5 | 1.8 | 16 | 11 | 5.0 | 1.6 | .5 | .6 | .5 | .4 |
| 19 | 1.5 | 1.0 | 3.0 | 1.6 | 14 | 11 | 5.0 | 1.6 | .5 | .6 | .4 | .4 |
| 20 | 1.5 | 1.0 | 5.0 | 1.4 | 11 | 11 | 5.0 | 1.1 | .4 | .6 | .4 | .4 |
| 21 | 1.5 | 1.0 | 4.0 | 1.4 | 8.0 | 13 | 5.0 | 1.1 | .4 | .6 | .4 | .4 |
| 22 | 1.5 | 1.0 | 3.5 | 1.2 | 7.0 | 18 | 5.0 | .9 | .4 | .6 | .4 | .5 |
| 23 | 1.5 | 1.5 | 3.0 | 1.2 | 6.0 | 18 | 4.2 | 1.1 | .4 | .6 | .4 | .5 |
| 24 | 1.5 | 1.5 | 3.0 | 1.0 | 7.0 | 13 | 3.5 | 1.2 | .4 | .6 | .4 | .5 |
| 25 | 1.5 | 1.5 | 3.0 | 4.0 | 10 | 12 | 3.5 | 1.2 | .4 | .6 | .4 | .5 |
| 26 | 1.5 | 1.5 | 3.0 | 2.6 | 15 | 12 | 4.6 | 1.4 | .4 | .6 | .4 | .5 |
| 27 | 1.5 | 1.5 | 3.0 | 2.0 | 15 | 11 | 5.4 | 1.4 | .4 | .8 | .4 | .5 |
| 28 | 1.5 | 1.5 | 3.0 | 2.4 | 0 | 11 | 5.0 | 1.4 | .4 | .8 | .4 | .5 |
| 29 | 1.5 | 1.5 | 3.0 | 2.2 | ...... | 11 | 5.0 | 1.4 | .4 | .6 | .4 | .5 |
| 30 | 1.5 | 1.5 | 3.0 | 2.0 | ...... | 10 | 4.6 | 1.3 | .4 | .6 | .4 | .6 |
| 31 | 1.5 | ...... | 3.0 | 2.2 | ...... | 8.9 | ...... | 1.2 | ...... | .6 | .4 | ...... |

*Daily discharge, in second-feet, of Sweetwater River near Descanso, Cal., for 1909–1912—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 0.6 | 0.7 | 0.8 | 1.2 | 0.8 | 1.5 | 26 | 12 | 3.6 |
| 2 | .5 | .7 | .8 | 1.2 | .8 | 12.6 | 20 | 12 | 3.8 |
| 3 | .5 | .7 | .8 | 1.2 | .8 | 2.7 | 12 | 8.5 | 4.9 |
| 4 | .5 | .7 | .8 | 1.2 | .8 | .8 | 12 | 8.5 | 3.9 |
| 5 | .5 | .7 | .8 | .8 | .8 | 22 | 12 | 8.5 | 3.8 |
| 6 | .6 | .7 | 1.2 | .8 | .8 | 58 | 7 | 8.5 | 3.8 |
| 7 | .6 | .7 | 1.4 | .8 | .8 | 44 | 5.4 | 8.5 | 2.7 |
| 8 | .6 | .7 | 1.2 | .8 | .8 | 300 | 7 | 57 | 2.7 |
| 9 | .6 | .7 | 1.1 | 1.2 | .8 | 280 | 9.8 | 41 | 2.7 |
| 10 | .6 | .7 | .9 | 1.2 | .8 | 20 | 16 | 16 | 2.7 |
| 11 | .6 | .7 | .9 | 1.2 | .8 | 16 | 31 | 12 | 2.7 |
| 12 | .6 | .8 | .9 | .8 | .8 | 13 | 75 | 12 | 2.7 |
| 13 | .6 | .8 | .9 | .8 | .8 | 13 | 67 | 8.5 | 2.0 |
| 14 | .6 | .8 | .9 | .8 | .8 | 20 | 94 | 6.7 | 2.0 |
| 15 | .6 | .8 | .9 | .8 | .8 | 12 | 74 | 4.9 | 2.0 |
| 16 | .6 | .8 | .9 | .8 | .8 | 7 | 74 | 4.9 | 2.0 |
| 17 | .6 | .8 | 1.4 | .8 | .8 | 5.4 | 65 | 4.9 | 2.0 |
| 18 | .6 | .8 | 1.2 | .8 | .8 | 5.4 | 57 | 6.7 | 2.0 |
| 19 | .6 | .8 | 1.1 | .8 | .8 | 5.4 | 40 | 6.7 | 1.4 |
| 20 | .6 | .8 | 1.1 | .8 | .8 | 12 | 41 | 6.7 | 1.4 |
| 21 | .6 | .8 | 1.1 | .8 | .8 | 9.8 | 27 | 6.7 | 1.4 |
| 22 | .6 | .8 | 1.1 | .8 | .8 | 12 | 22 | 6.7 | 1.4 |
| 23 | .6 | .8 | 1.1 | .8 | .8 | 12 | 16 | 6.7 | 1.4 |
| 24 | .6 | .8 | 1.1 | .8 | .8 | 7.0 | 16 | 6.7 | 1.4 |
| 25 | .6 | .8 | 1.4 | .8 | .8 | 5.4 | 16 | 6.7 | 1.4 |
| 26 | .6 | .8 | 1.2 | .8 | .8 | 21 | 12 | 6.7 | 1.4 |
| 27 | .9 | .8 | 1.2 | 1.2 | .8 | 20 | 12 | 6.7 | 1.4 |
| 28 | .8 | .8 | 1.5 | .8 | .8 | 16 | 12 | 6.7 | 1.4 |
| 29 | .8 | .8 | 2.5 | .8 | .8 | 16 | 12 | 6.7 | 1.4 |
| 30 | .8 | .8 | 1.6 | .8 | ........ | 21 | 12 | 6.7 | 1.0 |
| 31 | .7 | ........ | 1.4 | .8 | ........ | 21 | ........ | 4.9 | ........ |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to Dec. 31, 1909, well defined below 120 second-feet; Jan. 1 to Feb. 14, 1910, poorly defined; Feb. 15 to Mar. 2, 1910, indirect method for shifting channels; Mar. 3 to Mar. 12, 1910, poorly defined; Mar. 13 to Apr. 25, 1910, indirect method for shifting channels; Apr. 26 to Oct. 15, 1910, fairly well defined; Oct. 16, 1910, to Mar. 7, 1911, indirect method for shifting channels; Mar. 8, 1911, to Mar. 8, 1912, fairly well defined; Mar. 9 to Apr. 14, 1912, fairly well defined; Apr. 15 to June 30, 1912, fairly well defined. Discharge interpolated Feb. 23–25, 1909, Mar. 1–2, 1909, and May 1–8, 1911.

*Monthly discharge of Sweetwater River near Descanso, Cal., for 1906–1912.*

[Drainage area, 40 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1906.** | | | | | | | |
| January | 44 | 2.0 | 8.7 | 0.217 | 0.25 | 534 | |
| February | 86 | 4.2 | 22.3 | .558 | .58 | 1,240 | |
| March | 1,250 | 17.0 | 180 | 4.50 | 5.19 | 11,100 | |
| April | 84 | 26 | 48.5 | 1.21 | 1.35 | 2,890 | |
| May | 36 | 13 | 21.6 | .540 | .62 | 1,330 | |
| June | 15 | 2.6 | 7.0 | .176 | .20 | 418 | |
| July | 2.6 | 1.2 | 1.8 | .046 | .05 | 112 | |
| August | 4.6 | 1.1 | 1.8 | .044 | .05 | 108 | |
| September | 5.8 | 1.0 | 1.5 | .038 | .04 | 90 | |
| The period | | | | | | 17,800 | |
| **1906–7.** | | | | | | | |
| October | 1.4 | 1.0 | 1.1 | .028 | .03 | 68 | |
| November | 12 | 1.1 | 3.0 | .074 | .08 | 177 | |
| December | 66 | 4.4 | 10.1 | .252 | .29 | 121 | |
| January | 134 | 9 | 56.7 | 1.42 | 1.64 | 3,490 | B. |
| February | 63 | 18 | 28.6 | .715 | .74 | 1,590 | B. |
| March | 123 | 24 | 65.0 | 1.62 | 1.87 | 4,000 | B. |
| April | 96 | 23 | 39.8 | .995 | 1.11 | 2,370 | B. |
| May | 26 | 15 | 19.6 | .490 | .56 | 1,210 | B. |
| June | 15 | 6.5 | 9.8 | .245 | .27 | 583 | B. |
| July | 6.0 | 3.4 | 5.0 | .125 | .14 | 307 | B. |
| August | 3.7 | 2.3 | 2.9 | .072 | .08 | 178 | B. |
| September | 2.8 | 2.6 | 2.6 | .065 | .07 | 155 | B. |
| The year | 134 | 1.0 | 20.3 | .508 | 6.88 | 14,200 | |
| **1907–8.** | | | | | | | |
| October | 12 | 3.0 | 4.5 | .112 | .13 | 277 | B. |
| November | 3.0 | 1.9 | 2.6 | .065 | .07 | 155 | B. |
| December | 6.5 | 1.9 | 3.8 | .095 | .11 | 234 | B. |
| January | 13 | 2 | 4.9 | .122 | .14 | 301 | C. |
| February | 34 | 6 | 13.8 | .345 | .37 | 794 | C. |
| March | 26 | 5 | 10.2 | .255 | .29 | 627 | C. |
| April | 16 | 3 | 5.4 | .135 | .15 | 321 | C. |
| May | 11 | 1.5 | 3.6 | .090 | .10 | 221 | C. |
| June | 1.5 | .5 | 1.0 | .025 | .03 | 60 | C. |
| July | .4 | .4 | .4 | .010 | .01 | 25 | C. |
| August | 1.0 | .4 | .5 | .012 | .01 | 31 | C. |
| September | 20 | 1.0 | 1.8 | .045 | .05 | 107 | C. |
| The year | 34 | .4 | 4.38 | .109 | 1.46 | 3,150 | |
| **1908–9.** | | | | | | | |
| October | 2.0 | 1 | 1.0 | .025 | .03 | 61 | C. |
| November | 1.0 | 1 | 1.0 | .025 | .03 | 60 | C. |
| December | 1.5 | 1 | 1.5 | .038 | .04 | 92 | C. |
| January | 506 | 1.1 | 24.0 | .600 | .69 | 1,480 | B. |
| February | 177 | 2.2 | 61.6 | 1.54 | 1.60 | 3,420 | B. |
| March | 166 | .8 | 37.4 | .935 | 1.08 | 2,300 | A. |
| April | 91 | 13 | 35.2 | .880 | .98 | 2,090 | A. |
| May | 11 | 9.5 | 10.9 | .272 | .31 | 670 | A. |
| June | 9.5 | 4.4 | 6.65 | .166 | .19 | 396 | B. |
| July | 4.4 | 3.8 | 3.87 | .097 | .11 | 238 | B. |
| August | 8.0 | 3.8 | 4.88 | .122 | .14 | 300 | B. |
| September | 6.0 | 3.2 | 4.00 | .100 | .11 | 238 | B. |
| The year | 506 | .8 | 16.0 | .40 | 5.31 | 11,300 | |

Discharge of Sweetwater River near Dehesa, Cal., for 1906-1912—Continued.

| Month. | Discharge in second-feet: Maximum. | Discharge in second-feet: Minimum. | Discharge in second-feet: Mean. | Total in acre-feet. | Run-off: Second-feet per square mile. | Run-off: Depth in inches on drainage area. |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in ... basin:

Miscellaneous measurements in Sweetwater River basin.

| | | |
|---|---|---|
| [illegible] | [illegible] | [illegible] |

## SAN DIEGO RIVER BASIN.

### SAN DIEGO RIVER AT LAKESIDE, CAL.

This station, which is located about three-fourths of a mile above the San Diego, Cuyamaca & Eastern Railway station, at crossing of the road from Lakeside to Padre Barona Valley, on the Elcajon land grant, was established December 3, 1905.

Chocolate Creek enters the river from the south 7 miles above, and San Vicente Creek from the north 1 mile below the gaging station. The drainage area at this point is 208 square miles.

The San Diego flume diverts water from the river at a point about 1,000 feet below the junction of Boulder Creek and about 15 miles above the gaging station. This flume diverts all the low flow of the river and a sufficient amount of the winter flow to fill La Mesa storage reservoir. The present capacity of the flume is about 16 second-feet. In addition, there are five pumping plants, located from 1 to 3 miles above the station, that obtain water for irrigation from wells along the banks of the stream. Their capacity ranges from about one-half to 2½ second-feet. There are several similar pumping plants below the station. Cuyamaca reservoir, at the headwaters of Boulder Creek, has a capacity of 11,400 acre-feet.

The staff gage is in three sections on the left bank at the cable from which discharge measurements are made. The gage datum has remained unchanged since the station was established.

*Daily gage height, in feet, of San Diego River near Lakeside, Cal., for 1905–1907.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| **1905–6.** | | | | | | | | | | |
| 1 | | 2.66 | 2.90 | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | [illegible] | [illegible] |
| 2 | | 2.66 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | [illegible] | [illegible] |
| 3 | 2.60 | 2.66 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | [illegible] | [illegible] |
| 4 | 2.60 | 2.67 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 2.60 | 2.66 | 2.92 | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | [illegible] | [illegible] |
| 6 | 2.60 | 2.66 | 2.96 | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | [illegible] | [illegible] |
| 7 | 2.60 | 2.66 | 3.02 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | 2.60 | 2.66 | 3.12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 2.60 | 2.66 | 3.02 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 10 | 2.62 | 2.67 | 3.12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 11 | 2.62 | 2.66 | 3.12 | 3.06 | [illegible] | [illegible] | [illegible] | 3.4 | [illegible] | |
| 12 | 2.63 | 2.66 | 3.18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 13 | 2.62 | 2.66 | 3.18 | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | |
| 14 | 2.62 | 2.66 | 3.20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 15 | 2.63 | 2.66 | 3.26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 16 | 2.62 | 2.67 | 4.00 | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | [illegible] | |
| 17 | 2.63 | 2.67 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 18 | 2.64 | 2.67 | 3.46 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 19 | 2.64 | 2.74 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 20 | 2.66 | 3.91 | 3.26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 21 | 2.66 | 3.40 | 3.29 | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | 3.4 | |
| 22 | 2.66 | 3.35 | 3.34 | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | 3.4 | |
| 23 | 2.65 | 3.66 | 3.46 | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | [illegible] | |
| 24 | 2.65 | 3.07 | 3.36 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 25 | 2.65 | 3.00 | 3.24 | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | 3.4 | |
| 26 | 2.65 | 2.96 | 3.22 | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | [illegible] | |
| 27 | 2.67 | 2.92 | 3.18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 28 | 2.67 | 2.92 | 3.18 | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | [illegible] | |
| 29 | 2.67 | 2.92 | | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | [illegible] | |
| 30 | 2.66 | 2.91 | | [illegible] | 4.2 | [illegible] | [illegible] | 3.4 | [illegible] | |
| 31 | | 2.90 | | [illegible] | | [illegible] | | 3.4 | [illegible] | |
| **1906–7.** | | | | | | | | | | |
| 1 | | 3.5 | 3.95 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 2 | | 3.55 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 3 | | 3.65 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 4 | 3.35 | 3.6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 5 | 3.3 | 3.6 | 3.7 | 4.4 | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 6 | 3.3 | 3.95 | 3.7 | 4.1 | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 7 | 3.3 | 3.9 | 3.65 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 8 | 3.3 | 3.8 | 3.6 | [illegible] | [illegible] | [illegible] | 3.55 | [illegible] | | |
| 9 | 3.35 | 3.8 | [illegible] | [illegible] | [illegible] | [illegible] | 3.5 | [illegible] | | |
| 10 | 3.35 | 4.1 | 3.6 | 3.9 | [illegible] | 3.6 | [illegible] | [illegible] | | |
| 11 | 3.3 | 4.4 | [illegible] | [illegible] | [illegible] | 3.6 | [illegible] | [illegible] | | |
| 12 | 3.4 | 3.95 | 3.5 | 3.9 | [illegible] | 3.6 | 3.5 | [illegible] | | |
| 13 | 3.6 | 3.8 | 3.5 | 3.9 | [illegible] | 3.6 | 3.5 | [illegible] | | |
| 14 | 3.4 | 3.9 | 3.55 | 3.8 | [illegible] | 3.6 | 3.5 | [illegible] | | |
| 15 | 3.3 | 4.0 | 3.5 | 3.8 | [illegible] | 3.55 | 3.45 | [illegible] | | |
| 16 | 3.3 | 3.95 | 3.55 | [illegible] | 3.8 | 3.55 | 3.45 | [illegible] | | |
| 17 | 3.3 | 3.95 | 4.0 | 3.8 | 3.8 | 3.55 | 3.45 | [illegible] | | |
| 18 | 3.3 | 5.0 | 3.8 | 3.7 | 3.75 | 3.5 | 3.4 | [illegible] | | |
| 19 | 3.3 | 4.2 | 3.75 | 3.75 | 3.7 | 3.5 | 3.4 | 3.29 | | |
| 20 | 3.3 | 4.0 | 3.7 | 3.7 | 3.7 | 3.5 | 3.4 | 3.29 | | |
| 21 | 3.25 | 4.0 | 3.65 | 4.0 | 3.7 | 3.5 | 3.4 | 3.3 | | |
| 22 | 3.3 | 3.95 | 3.7 | 3.95 | 3.7 | 3.5 | 3.4 | 3.29 | | |
| 23 | 3.3 | 3.9 | 3.7 | 3.9 | 3.65 | 3.5 | 3.4 | [illegible] | | |
| 24 | 3.3 | 3.8 | 3.65 | 3.85 | 3.65 | 3.5 | 3.4 | 3.3 | | |
| 25 | 3.3 | 3.8 | 3.6 | 3.8 | 3.7 | 3.5 | 3.4 | 3.3 | | |
| 26 | 3.25 | 3.75 | 3.7 | 4.8 | 3.65 | 3.5 | 3.35 | [illegible] | | |
| 27 | 3.4 | 3.7 | 3.7 | 4.4 | 3.7 | 3.5 | 3.35 | 3.29 | | |
| 28 | 3.8 | 3.7 | 3.65 | 4.1 | 3.6 | 3.5 | 3.3 | 3.29 | | |
| 29 | 4.15 | 3.7 | | 3.95 | 3.65 | 3.5 | 3.3 | [illegible] | | |
| 30 | 3.8 | 3.8 | | 3.9 | 3.7 | 3.5 | 3.3 | [illegible] | | |
| 31 | 3.75 | 3.7 | | 3.95 | | 3.5 | | 3.27 | | |

*Daily gage height, in feet, of San Diego River near Lakeside, Cal., for 1906–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | 3.3 | 3.6 | 3.45 | 3.3 | 3.3 | 3.3 | ...... | ...... |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | 3.3 | 3.6 | 3.45 | 3.3 | 3.3 | 3.3 | ...... | ...... |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.5 | 3.4 | 3.35 | 3.3 | 3.3 | ...... | ...... |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.55 | 3.4 | 3.5 | 3.3 | 3.25 | ...... | ...... |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | 3.7 | 3.8 | 3.4 | 3.45 | 3.3 | 3.25 | ...... | ...... |
| 6 | [illegible] | [illegible] | 3.1 | [illegible] | 3.5 | 3.75 | 3.4 | 3.4 | 3.3 | 3.25 | ...... | ...... |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.65 | 3.4 | 3.35 | 3.3 | 3.25 | ...... | ...... |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.6 | 3.4 | 3.35 | 3.3 | 3.25 | ...... | ...... |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.6 | 3.4 | 3.3 | 3.3 | 3.25 | ...... | ...... |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | 4.0 | 3.55 | 3.4 | 3.3 | 3.3 | 3.25 | ...... | ...... |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | 3.5 | 3.4 | 3.3 | 3.3 | 3.25 | ...... | ...... |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.5 | 3.4 | 3.3 | 3.3 | 3.25 | ...... | ...... |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.5 | 3.35 | 3.35 | 3.3 | 3.25 | ...... | ...... |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | 3.35 | 3.4 | 3.3 | 3.25 | ...... | ...... |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | 3.35 | 3.35 | 3.3 | 3.25 | ...... | ...... |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | 3.3 | 3.3 | 3.3 | 3.25 | ...... | ...... |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | 3.35 | 3.3 | 3.3 | 3.25 | ...... | ...... |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | 3.35 | 3.3 | 3.3 | 3.2 | ...... | ...... |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | 3.35 | 3.3 | 3.3 | 3.2 | ...... | ...... |
| 20 | [illegible] | [illegible] | 3.15 | [illegible] | 3.5 | 3.45 | 3.3 | 3.3 | 3.3 | 3.2 | ...... | ...... |
| 21 | [illegible] | 3.1 | 3.15 | 3.2 | 3.5 | 3.45 | 3.3 | 3.3 | 3.3 | 3.1 | ...... | ...... |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | 3.35 | 3.3 | 3.3 | 3.1 | ...... | ...... |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | 3.5 | 3.3 | 3.3 | 3.1 | ...... | ...... |
| 24 | [illegible] | [illegible] | [illegible] | 3.4 | [illegible] | 3.35 | 3.5 | 3.3 | 3.3 | 3.1 | ...... | ...... |
| 25 | [illegible] | 3.1 | 3.2 | 3.5 | 3.5 | 3.4 | 3.45 | 3.3 | 3.3 | 3.1 | ...... | ...... |
| 26 | [illegible] | 3.1 | 3.2 | 3.6 | 3.45 | 3.6 | 3.4 | 3.3 | 3.3 | 3.0 | ...... | ...... |
| 27 | [illegible] | [illegible] | 3.2 | 3.45 | 3.4 | 3.7 | 3.4 | 3.3 | 3.3 | ...... | ...... | ...... |
| 28 | [illegible] | 3.1 | 3.2 | 3.45 | 3.4 | 3.6 | 3.35 | 3.3 | 3.3 | ...... | ...... | ...... |
| 29 | [illegible] | 3.1 | 3.2 | [illegible] | 3.45 | 3.5 | 3.3 | 3.3 | 3.3 | ...... | ...... | ...... |
| 30 | [illegible] | 3.1 | 3.2 | 4.5 | ...... | 3.45 | 3.3 | 3.3 | 3.3 | ...... | ...... | ...... |
| 31 | [illegible] | ...... | 3.2 | [illegible] | ...... | 3.45 | ...... | 3.3 | 3.3 | ...... | ...... | ...... |
| 1908–9. | | | | | | | | | | | | |
| 1 | ...... | ...... | ...... | 3.25 | 3.35 | 3.5 | 3.65 | 3.3 | 3.15 | 3.1 | 3.1 | ...... |
| 2 | ...... | ...... | ...... | 3.25 | 3.3 | 3.5 | 3.6 | 3.3 | 3.1 | 3.1 | 3.1 | ...... |
| 3 | ...... | ...... | ...... | 3.25 | 3.35 | 3.45 | 3.55 | 3.3 | 3.1 | 3.1 | 3.9 | ...... |
| 4 | ...... | ...... | ...... | 3.25 | [illegible] | 3.5 | 3.5 | 3.3 | 3.1 | 3.1 | 3.6 | ...... |
| 5 | ...... | ...... | ...... | 3.25 | 3.6 | 3.45 | 3.55 | 3.25 | 3.1 | 3.15 | [illegible] | ...... |
| 6 | ...... | ...... | ...... | 3.25 | 3.5 | 3.45 | 3.6 | 3.25 | 3.1 | 3.15 | 3.0 | ...... |
| 7 | ...... | ...... | ...... | 3.25 | 3.5 | 3.5 | 3.5 | 3.25 | 3.1 | 3.15 | 3.0 | ...... |
| 8 | ...... | ...... | ...... | 3.25 | 5.0 | 3.5 | 3.5 | 3.25 | 3.1 | 3.15 | 3.0 | ...... |
| 9 | ...... | ...... | ...... | 3.25 | 3.75 | 3.4 | 3.45 | 3.25 | 3.1 | 3.15 | ...... | ...... |
| 10 | ...... | ...... | ...... | 3.25 | 3.65 | 3.4 | 3.45 | 3.25 | 3.1 | 3.15 | ...... | ...... |
| 11 | ...... | ...... | ...... | 3.25 | 3.85 | 3.4 | 3.4 | 3.25 | 3.10 | 3.15 | ...... | ...... |
| 12 | ...... | ...... | ...... | 3.25 | 3.85 | 3.4 | 3.45 | 3.25 | 3.15 | 3.15 | ...... | ...... |
| 13 | ...... | ...... | ...... | 3.15 | 4.5 | 3.3 | 3.4 | 3.2 | 3.1 | 3.15 | ...... | ...... |
| 14 | ...... | ...... | ...... | 3.3 | 4.0 | 3.3 | 3.4 | 3.2 | 3.1 | 3.15 | ...... | ...... |
| 15 | ...... | ...... | ...... | 3.35 | 3.8 | 3.3 | 3.4 | 3.2 | 3.1 | 3.15 | ...... | ...... |
| 16 | ...... | ...... | ...... | 3.1 | 3.75 | 3.3 | 3.4 | 3.2 | 3.1 | 3.15 | ...... | ...... |
| 17 | ...... | ...... | 3.2 | 3.1 | 3.7 | 3.3 | 3.4 | 3.2 | 3.1 | 3.15 | ...... | ...... |
| 18 | ...... | ...... | 3.2 | 3.1 | 3.6 | 3.3 | 3.4 | 3.2 | 3.15 | 3.15 | ...... | ...... |
| 19 | ...... | ...... | 3.2 | 3.1 | 3.55 | 3.3 | 3.4 | 3.2 | 3.15 | 3.15 | ...... | ...... |
| 20 | ...... | ...... | 3.2 | 3.1 | 3.55 | 3.3 | 3.4 | 3.2 | 3.15 | 3.15 | ...... | ...... |
| 21 | ...... | ...... | 3.25 | 3.1 | 4.5 | 3.3 | 3.4 | 3.2 | 3.15 | 3.15 | ...... | ...... |
| 22 | ...... | ...... | 3.25 | 6.05 | 3.85 | 3.65 | 3.4 | 3.2 | 3.15 | 3.15 | ...... | ...... |
| 23 | ...... | ...... | 3.25 | 4.5 | 3.8 | 3.6 | 3.35 | 3.2 | 3.15 | 3.15 | ...... | ...... |
| 24 | ...... | ...... | 3.25 | 3.75 | 3.7 | 3.65 | 3.35 | 3.2 | 3.15 | 3.1 | ...... | ...... |
| 25 | ...... | ...... | 3.25 | 3.6 | 3.65 | 3.6 | 3.3 | 3.2 | 3.15 | 3.1 | ...... | ...... |
| 26 | ...... | ...... | 3.25 | 3.6 | 3.6 | 3.5 | 3.3 | 3.2 | 3.15 | 3.1 | ...... | ...... |
| 27 | ...... | ...... | 3.25 | 3.5 | 3.6 | 4.05 | 3.3 | 3.2 | 3.15 | 3.1 | ...... | ...... |
| 28 | ...... | ...... | 3.25 | 3.7 | 3.5 | 4.15 | 3.3 | 3.2 | 3.15 | 3.1 | ...... | ...... |
| 29 | ...... | ...... | 3.25 | 3.55 | ...... | 3.95 | 3.3 | 3.2 | 3.15 | 3.1 | ...... | ...... |
| 30 | ...... | ...... | 3.25 | 3.45 | ...... | 3.8 | 3.35 | 3.2 | 3.1 | 3.1 | ...... | ...... |
| 31 | ...... | ...... | 3.25 | 3.35 | ...... | 3.7 | ...... | 3.15 | ...... | 3.1 | ...... | ...... |

*Daily gage height, in feet, of San Diego River near Lakeside, Cal., for 1905–1911*—Contd.

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | |
| 1 | ........ | 4.02 | 3.23 | 3.20 | 3.36 | 3.08 | 3.00 | 2.98 |
| 2 | ........ | 4.15 | 3.30 | 3.18 | 3.33 | 3.08 | 3.00 | 2.98 |
| 3 | ........ | 3.95 | 3.25 | 3.15 | 3.38 | 3.08 | 3.00 | 3.00 |
| 4 | ........ | 3.78 | 3.20 | 3.12 | 3.30 | 3.07 | 2.95 | 3.00 |
| 5 | 3.2 | 3.65 | 3.12 | 3.13 | 3.29 | 3.10 | 2.95 | 3.00 |
| 6 | 3.2 | 3.52 | 3.20 | 3.12 | 3.27 | 3.06 | 2.95 | 3.00 |
| 7 | 3.2 | 3.48 | 3.18 | 3.18 | 3.30 | 3.07 | 2.97 | 2.96 |
| 8 | 3.2 | 3.48 | 3.20 | 3.18 | 3.27 | 3.06 | 3.00 | 2.95 |
| 9 | 3.2 | 3.40 | 3.20 | 3.19 | 3.20 | 3.05 | 3.00 | ........ |
| 10 | 3.8 | 3.50 | 3.20 | 3.15 | 3.18 | 3.04 | 2.98 | ........ |
| 11 | 3.2 | 3.45 | 3.15 | 3.12 | 3.20 | 3.04 | 2.95 | ........ |
| 12 | 2.85 | 3.50 | 3.15 | 3.17 | 3.29 | 3.03 | 2.90 | ........ |
| 13 | 2.75 | 3.40 | 3.11 | 3.11 | 3.40 | 3.03 | 2.90 | ........ |
| 14 | 2.7 | 3.35 | 3.11 | 3.08 | 3.30 | 3.03 | 2.98 | ........ |
| 15 | 2.6 | 3.35 | 3.11 | 3.09 | 3.25 | 3.00 | 2.97 | ........ |
| 16 | 2.55 | 3.70 | 3.15 | 3.16 | 3.20 | 3.02 | 2.98 | ........ |
| 17 | 2.65 | 3.96 | 3.12 | 3.10 | 3.18 | 3.01 | 2.97 | ........ |
| 18 | 2.65 | 3.55 | 3.17 | 3.11 | 3.14 | 3.02 | 2.98 | ........ |
| 19 | 2.65 | 3.45 | 3.20 | 3.11 | 3.16 | 3.03 | 2.96 | ........ |
| 20 | 2.75 | 3.40 | 3.22 | 3.13 | 3.15 | 3.01 | 2.96 | ........ |
| 21 | 3.4 | 3.35 | 3.45 | 3.11 | 3.12 | 3.02 | 2.96 | ........ |
| 22 | 3.5 | 3.30 | 3.22 | 3.14 | 3.11 | 3.02 | 2.98 | ........ |
| 23 | 3.35 | 3.26 | 3.19 | 3.15 | 3.11 | 3.01 | 2.98 | ........ |
| 24 | 3.45 | 3.22 | 3.18 | 3.14 | 3.08 | 3.02 | 2.98 | ........ |
| 25 | 3.2 | 3.21 | 3.19 | 3.13 | 3.07 | 3.03 | 2.98 | ........ |
| 26 | 3.1 | 3.28 | 3.20 | 3.25 | 3.09 | 3.03 | 2.98 | ........ |
| 27 | 3.1 | 3.25 | 3.15 | 3.30 | 3.05 | 3.03 | 3.00 | ........ |
| 28 | 3.1 | 3.22 | 3.17 | 3.55 | 3.03 | 3.03 | 2.98 | ........ |
| 29 | 3.0 | 3.23 | ........ | 3.75 | 3.02 | 3.02 | 2.98 | ........ |
| 30 | 3.0 | 3.20 | ........ | 3.7 | 3.03 | 3.01 | 3.00 | ........ |
| 31 | 3.0 | 3.18 | ........ | 3.5 | ........ | 3.01 | ........ | ........ |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | |
| 1 | ........ | 2.79 | 3.35 | 3.10 | 3.10 | 3.00 | ........ |
| 2 | ........ | 2.82 | 3.25 | 3.40 | 3.10 | 3.00 | 2.8 |
| 3 | ........ | 2.91 | 3.20 | 3.26 | 3.05 | 3.00 | 2.8 |
| 4 | ........ | 4.15 | 3.84 | 3.20 | 3.04 | 3.00 | 2.8 |
| 5 | ........ | 3.80 | 3.60 | 3.18 | 3.00 | 3.00 | 2.8 |
| 6 | ........ | 3.32 | 3.46 | 3.18 | 3.00 | 3.00 | 2.8 |
| 7 | ........ | 3.23 | 3.37 | 3.30 | 3.00 | 3.00 | 2.8 |
| 8 | ........ | 3.05 | 3.50 | 3.40 | 3.00 | 3.00 | ........ |
| 9 | ........ | 3.00 | 3.50 | 3.30 | 3.00 | 3.00 | ........ |
| 10 | ........ | 2.92 | 3.68 | 3.25 | 3.02 | 3.00 | ........ |
| 11 | ........ | 2.90 | 3.60 | 3.20 | 3.00 | 3.00 | ........ |
| 12 | ........ | 2.91 | 3.50 | 3.15 | 3.00 | 3.00 | ........ |
| 13 | ........ | 3.05 | 3.42 | 3.12 | 3.00 | 3.00 | ........ |
| 14 | ........ | 3.70 | 3.33 | 3.12 | 3.00 | 3.00 | ........ |
| 15 | ........ | 3.83 | 3.32 | 3.12 | 3.00 | 3.00 | ........ |
| 16 | ........ | 3.29 | 3.30 | 3.12 | 3.04 | 3.00 | ........ |
| 17 | ........ | 3.18 | 3.27 | 3.10 | 3.02 | 3.00 | ........ |
| 18 | ........ | 3.15 | 3.25 | 3.10 | 3.00 | 3.00 | ........ |
| 19 | ........ | 3.10 | 3.23 | 3.09 | 3.00 | 3.00 | ........ |
| 20 | ........ | 3.09 | 3.20 | 3.08 | 3.00 | 3.00 | ........ |
| 21 | ........ | 3.05 | 3.20 | 3.08 | 3.00 | 3.00 | ........ |
| 22 | ........ | 3.01 | 3.20 | 3.10 | 3.00 | 3.00 | ........ |
| 23 | ........ | 3.02 | 3.20 | 3.10 | 3.00 | 3.00 | ........ |
| 24 | ........ | 3.03 | 3.19 | 3.08 | 3.00 | 3.00 | ........ |
| 25 | ........ | 3.07 | 3.18 | 3.08 | 3.00 | 3.00 | ........ |
| 26 | 3.00 | 3.15 | 3.15 | 3.06 | 3.00 | 3.00 | ........ |
| 27 | 2.95 | 3.12 | 3.11 | 3.10 | 3.00 | 3.00 | ........ |
| 28 | 2.90 | 3.23 | 3.12 | 3.11 | 3.00 | 3.00 | ........ |
| 29 | 2.90 | ........ | 3.10 | 3.10 | 3.00 | 3.00 | ........ |
| 30 | 2.88 | ........ | 3.09 | 3.10 | 3.00 | 3.00 | ........ |
| 31 | 2.90 | ........ | 3.10 | ........ | 3.00 | ........ | ........ |

*[illegible] gage height, in feet, of San Diego River near Lakeside, Cal., for 1905–1912*—Cont'd.

| Day. | Mar. | Apr. | May. | June. | Day. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1912. | | | | | 1912. | | | | |
| [illegible] | [illegible] | [illegible] | 2.95 | 2.8 | 16 | 3.05 | 3.95 | 3.0 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 17 | 3.0 | 3.8 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 18 | 2.95 | 3.5 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 19 | 2.9 | 3.4 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 20 | 2.85 | 3.3 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 21 | 2.9 | 3.3 | 2.85 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.8 | 22 | 3.2 | 3.2 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.8 | 23 | 3.5 | 3.2 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.8 | 24 | 3.0 | 3.1 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 25 | 2.95 | 3.1 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 26 | 3.3 | 3.05 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 27 | 3.7 | 3.0 | 2.9 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 28 | 3.3 | 3.0 | 2.85 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.75 | 29 | 3.2 | 3.0 | 2.85 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.7 | 30 | 3.6 | 3.0 | 2.85 | [illegible] |
| | | | | | 31 | 3.8 | ........ | 2.8 | ........ |

NOTE.—[illegible] Sept. 9 to Dec. 3, 1906; Aug. 1 to Nov. 9, 1907; July [illegible] Aug. [illegible] Dec. [illegible], 1909; July 9, 1910, to Jan. 25, 1911; and July 1, 1911, to Mar. 9, 1912.

*[illegible] discharge, in second-feet, of San Diego River near Lakeside, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | |
| [illegible] | [illegible] | [illegible] | 133 | 135 | 31 | 9 | 5 | [illegible] |
| [illegible] | [illegible] | [illegible] | 125 | 120 | 30 | 9 | 5 | [illegible] |
| [illegible] | [illegible] | [illegible] | 106 | 106 | 29 | 9 | 5 | 300 |
| [illegible] | [illegible] | [illegible] | 110 | 95 | 28 | 9 | 5 | 125 |
| [illegible] | [illegible] | [illegible] | 105 | 106 | 27 | 9 | 5 | 125 |
| [illegible] | [illegible] | [illegible] | 106 | 125 | 26 | 8 | 4 | [illegible] |
| [illegible] | [illegible] | [illegible] | 106 | 100 | 25 | 8 | 4 | [illegible] |
| [illegible] | [illegible] | [illegible] | 100 | 96 | 24 | 8 | 4 | [illegible] |
| [illegible] | [illegible] | [illegible] | 70 | 96 | 23 | 8 | 4 | ........ |
| [illegible] | [illegible] | [illegible] | 70 | 96 | 22 | 8 | 4 | ........ |
| [illegible] | [illegible] | [illegible] | 75 | 97 | 22 | 8 | 4 | ........ |
| [illegible] | [illegible] | [illegible] | 75 | 98 | 21 | 8 | 4 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 92 | 20 | 7 | 4 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19 | 7 | 3 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19 | 7 | 3 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 74 | 18 | 7 | 3 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 67 | 17 | 7 | 3 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 63 | 16 | 7 | 3 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 59 | 15 | 7 | 3 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 55 | 15 | 7 | 3 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 51 | 14 | 6 | 3 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 47 | 13 | 6 | 2 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 43 | 12 | 6 | 2 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 42 | 11 | 6 | 2 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 40 | 10 | 6 | 2 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 39 | 10 | 6 | 2 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 37 | 10 | 6 | 2 | ........ |
| [illegible] | [illegible] | [illegible] | [illegible] | 36 | 10 | 6 | 2 | ........ |
| [illegible] | [illegible] | | [illegible] | 34 | 10 | 5 | 2 | ........ |
| [illegible] | [illegible] | | [illegible] | 33 | 9 | 5 | 1 | ........ |
| [illegible] | [illegible] | | [illegible] | ........ | 9 | ........ | 1 | ........ |

*Daily discharge, in second-feet, of San Diego River near Lakeside, Cal., for 1909–1912—Con.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | |
| 1 | ........ | 391 | 65 | 46 | 69 | 3.6 | 0.6 | 0.4 |
| 2 | ........ | 462 | 86 | 38 | 62 | 3.6 | .6 | .4 |
| 3 | ........ | 355 | 70 | 30 | 74 | 3.6 | .6 | .6 |
| 4 | ........ | 273 | 56 | 22 | 54 | 3.0 | .2 | .6 |
| 5 | 1 | 217 | 36 | 22 | 52 | 5.0 | .2 | .6 |
| 6 | 1 | 164 | 56 | 20 | 47 | 2.4 | .2 | .6 |
| 7 | 1 | 149 | 50 | 30 | 54 | 3.0 | .3 | .3 |
| 8 | 1 | 149 | 56 | 32 | 47 | 2.4 | .6 | .2 |
| 9 | 1 | 120 | 56 | 32 | 82 | 2.0 | .6 | ........ |
| 10 | 225 | 156 | 56 | 24 | 29 | 1.6 | .4 | ........ |
| 11 | 30 | 138 | 43 | 18 | 32 | 1.6 | .2 | ........ |
| 12 | 6 | 156 | 41 | 27 | 52 | 1.2 | .1 | ........ |
| 13 | 4 | 120 | 30 | 17 | 80 | 1.2 | .1 | ........ |
| 14 | 3 | 102 | 29 | 12 | 54 | 1.2 | .4 | ........ |
| 15 | 2 | 102 | 27 | 14 | 43 | .6 | .3 | ........ |
| 16 | 2 | 238 | 35 | 25 | 30 | 1.0 | .4 | ........ |
| 17 | 2 | 355 | 27 | 15 | 26 | .8 | .3 | ........ |
| 18 | 2 | 176 | 36 | 17 | 18 | 1.0 | .4 | ........ |
| 19 | 2 | 138 | 44 | 17 | 22 | 1.2 | .3 | ........ |
| 20 | 4 | 120 | 50 | 20 | 20 | .8 | .3 | ........ |
| 21 | 75 | 102 | 124 | 17 | 14 | 1.0 | .3 | ........ |
| 22 | 90 | 86 | 52 | 22 | 11 | 1.0 | .4 | ........ |
| 23 | 50 | 71 | 46 | 23 | 11 | .8 | .4 | ........ |
| 24 | 85 | 62 | 44 | 22 | 5.0 | 1.0 | .4 | ........ |
| 25 | 35 | 59 | 46 | 20 | 2.7 | 1.2 | .4 | ........ |
| 26 | 20 | 80 | 49 | 43 | 4.3 | 1.2 | .4 | ........ |
| 27 | 20 | 70 | 37 | 54 | 2.0 | 1.2 | .6 | ........ |
| 28 | 20 | 62 | 39 | 125 | 1.2 | 1.2 | .4 | ........ |
| 29 | 15 | 65 | ........ | 194 | 1.0 | 1.0 | .4 | ........ |
| 30 | 15 | 56 | ........ | 176 | 1.2 | .8 | .6 | ........ |
| 31 | 15 | 50 | ........ | 109 | ........ | .8 | ........ | ........ |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | 1911. | | | | | | |
| 1 | ...... | 2 | 84 | 17 | 9 | 0.2 | 16 | ...... | 97 | 67 | 16 | 1.2 | 0.2 |
| 2 | ...... | 4 | 56 | 88 | 9 | .2 | 17 | ...... | 65 | 58 | 12 | .4 | .2 |
| 3 | ...... | 16 | 38 | 44 | 3 | .2 | 18 | ...... | 50 | 52 | 12 | .2 | .2 |
| 4 | ...... | 655 | 290 | 33 | 2 | .2 | 19 | ...... | 40 | 46 | 10 | .2 | .2 |
| 5 | ...... | 375 | 167 | 29 | .3 | .2 | 20 | ...... | 37 | 40 | 8 | .2 | .2 |
| 6 | ...... | 123 | 113 | 29 | .3 | .2 | 21 | ...... | 23 | 40 | 8 | .2 | .2 |
| 7 | ...... | 93 | 80 | 57 | .3 | .2 | 22 | ...... | 18 | 40 | 11 | .2 | .2 |
| 8 | ...... | 43 | 120 | 83 | .3 | .2 | 23 | ...... | 20 | 40 | 11 | .2 | .2 |
| 9 | ...... | 32 | 117 | 55 | .3 | .2 | 24 | ...... | 18 | 35 | 7 | .2 | .2 |
| 10 | ...... | 18 | 140 | 43 | .5 | .2 | 25 | ...... | 24 | 32 | 7 | .2 | .2 |
| 11 | ...... | 14 | 176 | 32 | .2 | .2 | 26 | 32 | 37 | 27 | 5 | .2 | .2 |
| 12 | ...... | 16 | 133 | 22 | .2 | .2 | 27 | 22 | 30 | 20 | 10 | .2 | .2 |
| 13 | ...... | 37 | 105 | 16 | .2 | .2 | 28 | 14 | 56 | 21 | 11 | .2 | .2 |
| 14 | ...... | 295 | 75 | 16 | .2 | .2 | 29 | 14 | ...... | 17 | 10 | .2 | .2 |
| 15 | ...... | 116 | 72 | 16 | .2 | .2 | 30 | 12 | ...... | 15 | 9 | .2 | .2 |
| | | | | | | | 31 | 14 | ...... | 17 | ...... | .2 | ...... |

[illegible] second-feet, of San Diego River near Lakeside, Cal., for 190[illegible]–191[illegible]—Con.

| Day. | Mar. | Apr. | May. | June. | Day. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1912. | | | | |
| [illegible] | | [illegible] | [illegible] | 2 | 16 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | .5 | 17 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | .5 | 18 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | .5 | 19 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | .5 | 20 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | .5 | 21 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | 1.5 | 22 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | 1.5 | 23 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | 1.5 | 24 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | .5 | 25 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 26 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | 27 | 146 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | [illegible] | | 29 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 15[illegible] | [illegible] | [illegible] | [illegible] |
| | | | | | 31 | [illegible] | | [illegible] | |

[illegible] Jan. [illegible] to Aug. 8, 1909, and Dec. [illegible] to 31, 1909, estimated [illegible] conditions; Jan. 1 to Feb. [illegible], 1910, from rating curve [illegible] to Mar. 11, 1910, indirect method for shifting [illegible] fairly well defined between 15 and 80 second-feet [illegible] Apr. 25 to July 8, 1910, from rating curve [illegible] shifting channels; May 11 to June 30, 1911 [illegible] 1912, not well defined; May 6 to June [illegible] [illegible] no discharge is given.

[illegible] near Lakeside, Cal., for 1906–1908.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | 16.7 | 1,03[illegible] | |
| [illegible] | [illegible] | [illegible] | 43.[illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | 68[illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | 16,5[illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | 4,0[illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | | | [illegible] | [illegible] | |
| The year | | | | [illegible] | |
| [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | | | [illegible] | [illegible] | |

## SAN DIEGO FLUME NEAR LAKESIDE, CAL.

The San Diego flume which diverts water from San Diego River 12½ miles below the Cuyamaca reservoir, is 30 miles long, 6 feet wide, and 16 inches deep, and has a capacity of 16 second-feet. It discharges into the La Mesa reservoir, about 8 miles northeast of San Diego. Prior to 1907 this system supplied water to the city of San Diego for municipal purposes, but now supplies water for irrigation for about 6,000 acres. There is considerable loss between the intake and the gaging station, due to leakage in the flume. Occasionally water is diverted into this flume from the South Fork of San Diego River. On the Capitan Grande Indian Reservation there is a diversion from the flume for irrigation, so the following record does not show the total diversion.

The station, which is located one-fourth mile above the trestle crossing at Los Coches Creek, about 3 miles southeast of Lakeside, was established January 1, 1907.

Discharge measurements are made at the reference point at the patrolman's cabin.

*Discharge measurements of San Diego flume near Lakeside, Cal., in 1908–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1908. | | *Feet.* | *Sec.-ft.* | 1910. | | *Feet.* | *Sec.-ft.* |
| May 27 | W. V. Hardy | 0.66 | 9.6 | Apr. 1 | W. V. Hardy | 0.68 | 11 |
| Nov. 13 | ....do | .50 | 5.8 | 3 | ....do | .51 | 6.8 |
| Dec. 6 | ....do | .27 | 1.8 | 25 | ....do | .72 | 12 |
| | | | | 27 | ....do | .76 | 12 |
| 1909. | | | | May 6 | ....do | .72 | 11 |
| Jan. 25 | W. V. Hardy | .52 | 6.3 | 23 | ....do | .57 | 8 |
| Mar. 23 | ....do | .51 | 6.2 | June 3 | ....do | .66 | 9.5 |
| 25 | ....do | .74 | 12.4 | 26 | ....do | .64 | 8.1 |
| Apr. 6 | ....do | .42 | 4.5 | Nov. 18 | ....do | .30 | 2.7 |
| 19 | Clapp and Hardy | .74 | 11.5 | | | | |
| May 25 | W. V. Hardy | .80 | 11.6 | 1911. | | | |
| | | | | Feb. 10 | W. V. Hardy | .82 | 14 |
| 1910. | | | | Oct. 9 | F. C. Ebert | ........ | 0 |
| Jan. 22 | W. V. Hardy | .35 | 3.3 | | | | |
| Feb. 12 | ....do | .53 | 7.8 | 1912. | | | |
| Mar. 4 | ....do | .56 | 8.8 | May 6 | F. C. Ebert | .76 | 12.8 |
| 11 | ....do | .63 | 9.8 | June 29 | ....do | .68 | 10.4 |

*Daily gage height, in feet, of San Diego flume near Lakeside, Cal., for 1907–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1907. | | | | | | | | | |
| 1 | 0.64 | 0.21 | 0.33 | 0.54 | 0.71 | 0.86 | 0.62 | 0.65 | 0.67 |
| 2 | .65 | .17 | .32 | .55 | .71 | .78 | .64 | .62 | .60 |
| 3 | .75 | .17 | .31 | .52 | .71 | .70 | .69 | .60 | .54 |
| 4 | .67 | .17 | .40 | .53 | .74 | .67 | .71 | .57 | .57 |
| 5 | .58 | .24 | .43 | .53 | .67 | .53 | .70 | .57 | .67 |
| 6 | .58 | .22 | .41 | .50 | .62 | .55 | .70 | .58 | .65 |
| 7 | .55 | .21 | .41 | .52 | .62 | .55 | .70 | .56 | .64 |
| 8 | .67 | .23 | .31 | .52 | .62 | .61 | .71 | .55 | .59 |
| 9 | .47 | .24 | .31 | .50 | .62 | .65 | .69 | .52 | .60 |
| 10 | .43 | .23 | .31 | .50 | .62 | .60 | .66 | .55 | .66 |
| 11 | .29 | .24 | .30 | .50 | .73 | .62 | .66 | .61 | .66 |
| 12 | .35 | .24 | .32 | .58 | .79 | .65 | .61 | .62 | .67 |
| 13 | .44 | .39 | .34 | .58 | .76 | .73 | .60 | .66 | .67 |
| 14 | .40 | .47 | .35 | .55 | .69 | .88 | .60 | .65 | .68 |
| 15 | .35 | .46 | .33 | .54 | .67 | .60 | .66 | .65 | .66 |
| 16 | .36 | .50 | .33 | .53 | .67 | .55 | .69 | .81 | .66 |
| 17 | .38 | .49 | .33 | .52 | .66 | .60 | .69 | .67 | .67 |
| 18 | .35 | .47 | .35 | .51 | .67 | .64 | .66 | .66 | .67 |
| 19 | .27 | .40 | .33 | .50 | .67 | .62 | .62 | .66 | .68 |
| 20 | .30 | .27 | .35 | .50 | .65 | .60 | .65 | .67 | .66 |
| 21 | .32 | .27 | .41 | .50 | .67 | .64 | .66 | .60 | .64 |
| 22 | .35 | .30 | .40 | .65 | .69 | .67 | .65 | .65 | .49 |
| 23 | .31 | .27 | .38 | .71 | .72 | .65 | .65 | .60 | .51 |
| 24 | .33 | .44 | .44 | .71 | .81 | .65 | .65 | .58 | .67 |
| 25 | .33 | .54 | .38 | .71 | .82 | .62 | .65 | .57 | .67 |
| 26 | .22 | .52 | .32 | .71 | .83 | .64 | .67 | .59 | .67 |
| 27 | .36 | .45 | .36 | .71 | .84 | .64 | .67 | .65 | .66 |
| 28 | .27 | .33 | .38 | .71 | .85 | .62 | .68 | .66 | .67 |
| 29 | .51 | ........ | .38 | .71 | .88 | .61 | .65 | .65 | .63 |
| 30 | .42 | ........ | .36 | .71 | .88 | .62 | .64 | .67 | .64 |
| 31 | .33 | ........ | .48 | ........ | .88 | ........ | .65 | .68 | ........ |

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 0.61 | 0.43 | 0.50 | 0.43 | 0.71 | 0.34 | 0.44 | 0.71 | 0.59 | 0.57 | 0.62 | 0.56 |
| 2 | .61 | .38 | .30 | .42 | .71 | .34 | .45 | .76 | .53 | .58 | .62 | .54 |
| 3 | .64 | .43 | .42 | .40 | .79 | .36 | .45 | .76 | .53 | .58 | .64 | .56 |
| 4 | .61 | .42 | .37 | .40 | .49 | .33 | .55 | .74 | .52 | .56 | .60 | .60 |
| 5 | .59 | .41 | .52 | .40 | .56 | .28 | .53 | .72 | .51 | .53 | .56 | .58 |
| 6 | .58 | .38 | .31 | .39 | .58 | .27 | .53 | .71 | .52 | .54 | .58 | .52 |
| 7 | .60 | .40 | .56 | .31 | .60 | .27 | .55 | .70 | .50 | .54 | .51 | .50 |
| 8 | .57 | .44 | .55 | .29 | .62 | .27 | .62 | .69 | .50 | .56 | .54 | .51 |
| 9 | .52 | .44 | .35 | .30 | .62 | .26 | .64 | .68 | .50 | .59 | .58 | .56 |
| 10 | .54 | .30 | .15 | .30 | .50 | .26 | .62 | .68 | .50 | .60 | .58 | .58 |
| 11 | .54 | .44 | .18 | .40 | .49 | .31 | .62 | .68 | .55 | .61 | .41 | .52 |
| 12 | .53 | .42 | .24 | .42 | .48 | .43 | .71 | .71 | .60 | .59 | .26 | .52 |
| 13 | .51 | .39 | .13 | .50 | .54 | .43 | .71 | .73 | .58 | .59 | .35 | .46 |
| 14 | .52 | .28 | .16 | .50 | .31 | .43 | .71 | .70 | .53 | .60 | .57 | .51 |
| 15 | .64 | .08 | .38 | .48 | .28 | .42 | .69 | .68 | .52 | .60 | .58 | .56 |
| 16 | .61 | .18 | .11 | .49 | .40 | .41 | .69 | .66 | .54 | .61 | .49 | .60 |
| 17 | .55 | .25 | .08 | .54 | .60 | .41 | .69 | .65 | .55 | .62 | .54 | .61 |
| 18 | .48 | .12 | .03 | .52 | ....... | .42 | .68 | .61 | .57 | .58 | .56 | .61 |
| 19 | .47 | .21 | .02 | .46 | ....... | .42 | .65 | .57 | .57 | .55 | .57 | .62 |
| 20 | .49 | ....... | .38 | .48 | .48 | .45 | .66 | .51 | .57 | .50 | .59 | .55 |
| 21 | .39 | ....... | .29 | .55 | .48 | .41 | .69 | .57 | .55 | .50 | .58 | .54 |
| 22 | .46 | ....... | .41 | .57 | .48 | .42 | .72 | .53 | .55 | .59 | .58 | .52 |
| 23 | .55 | .10 | .25 | .60 | .48 | .41 | .64 | .54 | .56 | .60 | .57 | .61 |
| 24 | .49 | .51 | .25 | .66 | .48 | .40 | .69 | .49 | .54 | .58 | .56 | .66 |
| 25 | .52 | .54 | .38 | .71 | .48 | .39 | .72 | .50 | .55 | .50 | .57 | .58 |
| 26 | .54 | .54 | ....... | .71 | .48 | .45 | .71 | .58 | .55 | .42 | .60 | .64 |
| 27 | .51 | .55 | .24 | .71 | .49 | .46 | .69 | .61 | .57 | .54 | .59 | .64 |
| 28 | .52 | .20 | .38 | .71 | .46 | .39 | .69 | .61 | .58 | .56 | .59 | .64 |
| 29 | .53 | .42 | .50 | .68 | .36 | .41 | .71 | .58 | .58 | .55 | .59 | .62 |
| 30 | .34 | .33 | .64 | .71 | ....... | .45 | .70 | .58 | .57 | .56 | .59 | .59 |
| 31 | .36 | ....... | .34 | .73 | ....... | .45 | ....... | .59 | ....... | .61 | .60 | ....... |

*Daily gage height, in feet, of San Diego flume near Lakeside, Cal., for 1907-1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908-9. | | | | | | | | | | | | |
| | 0.55 | 0.50 | 0.47 | 0.47 | 0.80 | 0.02 | 0.38 | 0.77 | 0.68 | 0.46 | 0.47 | 0.58 |
| | .59 | .48 | .44 | .50 | .43 | ...... | .39 | .75 | .60 | .46 | .55 | .62 |
| | .59 | .45 | .33 | .43 | .33 | ...... | .31 | .76 | .61 | .48 | .59 | .55 |
| | .57 | .46 | .10 | .33 | .40 | .17 | .46 | .76 | .56 | .53 | .59 | .46 |
| | .56 | .48 | .27 | .30 | .36 | .18 | .41 | .75 | .28 | .54 | .60 | .50 |
| | .54 | .47 | .24 | .30 | .33 | ...... | .41 | .76 | .17 | .54 | .57 | .53 |
| | .52 | .44 | .34 | .28 | .36 | ...... | .46 | .80 | .59 | .59 | .49 | .65 |
| | .51 | .42 | .48 | .29 | .45 | ...... | .60 | .79 | .62 | .59 | .49 | .70 |
| | .50 | .43 | .48 | .34 | .40 | .44 | .61 | .78 | .61 | .55 | .54 | .65 |
| | .58 | .45 | .44 | .47 | .29 | .28 | .61 | .78 | .60 | .54 | .60 | .59 |
| | .54 | .51 | .42 | .48 | .34 | .19 | .60 | .77 | .57 | .57 | .59 | .60 |
| | .54 | .51 | .36 | .48 | .38 | .04 | .59 | .77 | .53 | .58 | .60 | .59 |
| | .57 | .50 | .32 | .35 | .45 | .45 | .59 | .80 | .50 | .57 | .56 | .58 |
| | .57 | .49 | .33 | .43 | .48 | .33 | .53 | .80 | .62 | .59 | .66 | .57 |
| | .57 | .49 | .33 | .52 | .33 | .34 | .65 | .78 | .68 | .21 | .09 | .54 |
| | .59 | .49 | .32 | .60 | .16 | .22 | .73 | .76 | .70 | .56 | ...... | .53 |
| | .58 | .48 | .38 | .66 | .34 | .20 | .71 | .75 | .69 | .56 | ...... | .53 |
| | .53 | .50 | .38 | .66 | .25 | .25 | .72 | .80 | .70 | .55 | ...... | .53 |
| | .44 | .52 | .33 | .61 | .10 | ...... | .74 | .79 | .71 | .55 | .53 | .53 |
| | .47 | .50 | .28 | .56 | .10 | .55 | .72 | .79 | .65 | .53 | .57 | .51 |
| | .54 | .45 | .25 | .57 | .57 | .44 | .74 | .79 | .58 | .54 | .63 | .52 |
| | .53 | .45 | .24 | .15 | .03 | .45 | .73 | .79 | .54 | .56 | .63 | .58 |
| | .51 | .47 | .23 | .19 | ...... | .42 | .74 | .77 | .51 | .62 | .62 | .60 |
| | .52 | .48 | .23 | .41 | ...... | .51 | .74 | .78 | .50 | .70 | .66 | .60 |
| | .49 | .32 | .21 | .55 | ...... | .32 | .71 | .77 | .49 | .65 | .66 | .60 |
| | .49 | .33 | .17 | .71 | .34 | .35 | .72 | .76 | .51 | .58 | .66 | .57 |
| | .51 | .47 | .17 | .71 | ...... | .44 | .74 | .73 | .51 | .59 | .63 | .51 |
| | .52 | .48 | .18 | .71 | .70 | .40 | .78 | .75 | .55 | .59 | .63 | .52 |
| | .55 | .49 | .27 | .84 | ...... | .27 | .78 | .77 | .59 | .56 | .55 | .49 |
| | .56 | .48 | .29 | .84 | ...... | .26 | .78 | .76 | .52 | .53 | .58 | .49 |
| | .55 | ...... | .38 | .84 | ...... | .22 | ...... | .70 | ...... | .50 | .56 | ...... |
| 1909-10. | | | | | | | | | | | | |
| | .48 | .44 | .34 | .53 | ...... | ...... | .54 | .76 | .60 | .61 | .52 | .60 |
| | .49 | .47 | .26 | .37 | ...... | .16 | .44 | .75 | .62 | .61 | .57 | .65 |
| | .49 | .49 | .28 | .30 | ...... | ...... | .45 | .73 | .65 | .59 | .60 | .69 |
| | .49 | .48 | .33 | .26 | ...... | .55 | .29 | .70 | .66 | .58 | .60 | .64 |
| | .49 | .47 | .34 | .23 | .14 | .53 | .26 | .70 | .65 | .57 | .56 | .65 |
| | .49 | .52 | .53 | .06 | .40 | .43 | .25 | .72 | .64 | .65 | .59 | .43 |
| | .48 | .53 | .59 | ...... | ...... | ...... | .34 | .72 | .64 | .61 | .58 | .21 |
| | .48 | .54 | .56 | ...... | ...... | ...... | .52 | .69 | .60 | .56 | .56 | .60 |
| | .54 | .54 | .46 | .10 | .04 | ...... | .58 | .65 | .58 | .55 | .57 | .62 |
| | .49 | .48 | .45 | .32 | ...... | .39 | .40 | .64 | .51 | .51 | .59 | .67 |
| | .49 | .41 | .58 | .44 | .16 | .63 | .29 | .64 | .50 | .54 | .57 | .57 |
| | .52 | .39 | .65 | .41 | .35 | .63 | .29 | .62 | .49 | .56 | .58 | .58 |
| | .51 | .30 | .65 | .40 | .57 | .60 | .33 | .60 | .58 | .57 | .61 | .63 |
| | .54 | .18 | .66 | .39 | .34 | .26 | .45 | .61 | .62 | .60 | .57 | .65 |
| | .56 | .43 | .67 | .44 | .32 | .05 | .60 | .67 | .61 | .59 | .58 | .58 |
| | .52 | .33 | .60 | .39 | .24 | .41 | .68 | .65 | .60 | .59 | .60 | .60 |
| | .49 | .32 | .56 | .41 | .14 | .58 | .67 | .58 | .59 | .56 | .61 | .58 |
| | .49 | .25 | .57 | .36 | ...... | .58 | .67 | .56 | .57 | .54 | .61 | .59 |
| | .49 | .16 | .55 | .33 | ...... | .55 | .75 | .57 | .57 | .56 | .62 | .58 |
| | .49 | .18 | .58 | .33 | ...... | .55 | .82 | .59 | .56 | .57 | .59 | .59 |
| | .49 | .39 | .62 | .31 | .21 | .55 | .80 | .64 | .57 | .56 | .57 | .68 |
| | .46 | .50 | .70 | .32 | .41 | .54 | .76 | .60 | .59 | .57 | .59 | .67 |
| | .42 | .48 | .72 | .28 | .35 | .57 | .75 | .57 | .59 | .58 | .58 | .64 |
| | .36 | .43 | .71 | .30 | .24 | .60 | .72 | .54 | .59 | .55 | .59 | .63 |
| | .42 | .40 | .70 | .23 | ...... | .54 | .74 | .52 | .61 | .58 | .52 | .58 |
| | .52 | .48 | .67 | ...... | .47 | .57 | .76 | .55 | .60 | .61 | .53 | .59 |
| | .61 | .49 | .67 | ...... | .46 | .39 | .76 | .55 | .59 | .60 | .53 | .62 |
| | .60 | .55 | .66 | ...... | .15 | .11 | .77 | .56 | .59 | .54 | .46 | .61 |
| | .50 | .48 | .68 | .53 | ...... | .27 | .76 | .56 | .58 | .51 | .46 | .58 |
| | .45 | .47 | .71 | .28 | ...... | ...... | .56 | .59 | .57 | .49 | .54 | .58 |
| | .44 | ...... | .69 | ...... | ...... | .19 | ...... | .64 | ...... | .51 | .59 | ...... |

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| [illegible] | [illegible] | Jan | Feb | Mar | Apr | May | Jun |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | 0.[illegible] | 0.[illegible] | [illegible] | [illegible] |

[illegible]

*Rating table for San Diego flume near Lakeside, Cal., for 1907 and 1908.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.00 | 0.00 | 0.25 | 1.66 | 0.50 | 5.90 | 0.75 | 12.22 |
| .05 | .12 | .30 | 2.30 | .55 | 7.02 | .80 | 13.70 |
| .10 | .30 | .35 | 3.05 | .60 | 8.20 | .85 | 15.20 |
| .15 | .64 | .40 | 3.90 | .65 | 9.47 | .90 | 16.70 |
| .20 | 1.10 | .45 | 4.85 | .70 | 10.80 | | |

NOTE.—This table is not applicable for obstructed-channel conditions. It is based on seven discharge measurements made during 1908 and 1909 and is well defined.

*Daily discharge, in second-feet, of San Diego flume near Lakeside, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 5.4 | 13 | 0.0 | 3.6 | 12 | 10 | 5.2 | 5.4 | 7.7 |
| 2 | 6.0 | 4.6 | .0 | 3.8 | 12 | 8.2 | 5.2 | 7.1 | 8.7 |
| 3 | 4.6 | 2.8 | .0 | 2.5 | 12 | 8.4 | 5.6 | 8.0 | 7.1 |
| 4 | 2.8 | 4.0 | .7 | 5.2 | 12 | 7.3 | 6.6 | 8.0 | 5.2 |
| 5 | 2.3 | 3.3 | .8 | 4.2 | 12 | 2.0 | 6.9 | 8.2 | 6.0 |
| 6 | 2.3 | 2.8 | .0 | 4.2 | 12 | .7 | 6.9 | 7.5 | 6.6 |
| 7 | 2.0 | 3.3 | .0 | 5.2 | 13 | 8.0 | 8.0 | 5.8 | 9.4 |
| 8 | 2.1 | 5.0 | .0 | 8.2 | 13 | 8.7 | 8.0 | 5.8 | 11 |
| 9 | 3.0 | 4.0 | 4.8 | 8.4 | 13 | 8.4 | 7.1 | 6.9 | 9.4 |
| 10 | 5.4 | 2.1 | 2.0 | 8.4 | 13 | 8.2 | 6.9 | 8.2 | 8.0 |
| 11 | 5.6 | 3.0 | .9 | 8.2 | 12 | 7.5 | 7.5 | 8.0 | 8.2 |
| 12 | 5.6 | 3.6 | .1 | 8.0 | 12 | 6.6 | 7.7 | 8.2 | 8.0 |
| 13 | 3.1 | 5.0 | 5.0 | 8.0 | 13 | 6.0 | 7.5 | 7.3 | 7.7 |
| 14 | 4.6 | 4.6 | 2.8 | 6.6 | 13 | 8.7 | 8.0 | 9.6 | 7.5 |
| 15 | 6.4 | 2.8 | 3.0 | 9.4 | 13 | 10 | 1.1 | .3 | 6.9 |
| 16 | 8.2 | .7 | 1.2 | 11 | 12 | 11 | 7.3 | .0 | 6.6 |
| 17 | 9.6 | 3.0 | 1.0 | 11 | 12 | 10 | 7.3 | .0 | 6.6 |
| 18 | 9.6 | 1.6 | 1.6 | 11 | 13 | 11 | 7.1 | .0 | 6.6 |
| 19 | 8.4 | .3 | .0 | 12 | 13 | 11 | 7.1 | 6.6 | 6.6 |
| 20 | 7.3 | .3 | 7.1 | 11 | 13 | 9.4 | 6.6 | 7.5 | 6.2 |
| 21 | 7.5 | 7.5 | 4.8 | 12 | 13 | 7.7 | 6.9 | 8.9 | 6.4 |
| 22 | .6 | .1 | 5.0 | 11 | 13 | 6.9 | 7.3 | 8.9 | 7.7 |
| 23 | .9 | .0 | 4.4 | 12 | 12.4 | 6.2 | 8.7 | 8.7 | 8.2 |
| 24 | 4.2 | .0 | 6.2 | 12 | 13 | 6.0 | 11 | 9.6 | 8.2 |
| 25 | 7.1 | .0 | 2.6 | 11 | 12 | 5.8 | 9.4 | 9.6 | 8.2 |
| 26 | 11 | 3.0 | 3.1 | 11 | 12 | 6.2 | 7.7 | 9.6 | 7.5 |
| 27 | 11 | .0 | 4.8 | 12 | 11 | 6.2 | 8.0 | 8.9 | 6.2 |
| 28 | 11 | 11 | 4.0 | 13 | 12 | 7.1 | 8.0 | 8.9 | 6.4 |
| 29 | 14 | ........ | 1.8 | 13 | 12 | 8.0 | 7.3 | 7.1 | 5.8 |
| 30 | 14 | ........ | 1.7 | 13 | 12 | 6.4 | 6.6 | 7.7 | 5.8 |
| 31 | 15 | ........ | 1.2 | ........ | 11 | ........ | 6.0 | 7.3 | ........ |

[illegible]

[illegible]

*aily discharge, in second-feet, of San Diego flume near Lakeside, Cal., for 1909–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| | 0.0 | 0.0 | 0.0 | 0.6 | 1.0 | 2.0 | 14.4 | 11.4 | 14.2 |
| | .0 | .0 | .0 | .2 | 1.0 | 5.0 | 14.4 | 5.0 | 13.1 |
| | .0 | .0 | .0 | .2 | 1.0 | 5.8 | 13.6 | 7.4 | 12.0 |
| | .1 | .0 | .0 | .0 | 1.0 | 6.4 | 12.8 | 13.6 | 10.9 |
| | .0 | .0 | .0 | .0 | 1.0 | 9.0 | 14.4 | 12.8 | 10.7 |
| | .1 | .0 | .0 | .2 | .9 | 9.7 | 13.6 | 15.0 | 10.7 |
| | .0 | .0 | .0 | .0 | .9 | 8.0 | 14.2 | 13.1 | 10.2 |
| | .0 | .0 | .0 | .0 | 1.0 | 5.4 | 16.1 | 12.0 | 9.5 |
| | 2.2 | .0 | .0 | .0 | 1.0 | 6.4 | 15.0 | 10.9 | 9.0 |
| | .0 | .0 | .0 | 1.5 | 1.1 | 4.4 | 15.0 | 10.7 | 9.7 |
| | .0 | .0 | .0 | .0 | 1.1 | 11.2 | 14.4 | 5.8 | 9.5 |
| | .0 | .0 | .0 | .6 | 1.0 | 11.7 | 12.2 | 5.6 | 9.0 |
| | .0 | .0 | .0 | 1.0 | 1.0 | 10.9 | 8.5 | 5.2 | 8.0 |
| | .0 | .0 | .0 | .0 | 1.0 | 13.9 | 8.5 | 8.5 | 8.5 |
| | .0 | .0 | .0 | 3.0 | 1.0 | 14.4 | 9.7 | 10.4 | 8.5 |
| | .0 | .0 | .0 | .1 | .9 | 14.4 | 12.8 | 6.7 | 7.6 |
| | .0 | .0 | .0 | .4 | .9 | 12.2 | 12.5 | 12.5 | 6.4 |
| | .0 | .0 | .0 | 2.7 | .9 | 13.9 | 12.2 | 15.3 | 3.9 |
| | .0 | .0 | .0 | 1.5 | .9 | 13.9 | 13.1 | 15.3 | 5.6 |
| | .0 | .0 | .0 | .8 | 1.3 | 13.6 | 13.1 | 15.0 | 7.1 |
| | .0 | .0 | .0 | .8 | 1.8 | 13.3 | 12.8 | 15.6 | 8.0 |
| | .0 | .0 | .0 | .8 | 1.5 | 13.9 | 8.0 | 14.7 | 10.4 |
| | .0 | .0 | .0 | .6 | 1.1 | 13.3 | 8.5 | 15.3 | 10.7 |
| | .0 | .0 | .0 | .3 | 1.3 | 11.4 | 14.4 | 12.8 | 11.2 |
| | .0 | .0 | .0 | 1.1 | 1.1 | 12.5 | 14.2 | 14.4 | 10.4 |
| | .0 | .0 | .0 | 1.0 | 1.0 | 12.2 | 14.7 | 14.4 | 9.0 |
| | .0 | .0 | .0 | 1.1 | 1.1 | 11.7 | 14.7 | 14.2 | 9.0 |
| | .0 | .0 | .0 | 1.7 | 1.0 | 13.3 | 14.4 | 13.9 | 9.5 |
| | .0 | .0 | .7 | 1.5 | 1.0 | 13.9 | 15.0 | 13.9 | 10.2 |
| | .0 | .0 | 3.0 | 1.6 | ........ | 14.7 | 14.7 | 14.7 | 11.7 |
| | .0 | ........ | .4 | 1.0 | ........ | 13.3 | ........ | 14.4 | ........ |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to Dec. 31, 1909, well efined; Jan. 1, 1910, to Dec. 31, 1911, fairly well defined; and Jan. 1 to June 30, 1912, fairly well defined.

*Monthly discharge of San Diego flume near Lakeside, Cal., for 1907–8*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Accuracy. | Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|---|---|
| 1907. | | | | 1907–8. | | | |
| anuary | 4.62 | 284 | A. | January | 6.38 | 392 | A. |
| 'ebruary | 2.97 | 165 | A. | February | 6.02 | 326 | A. |
| larch | 3.31 | 204 | A. | March | 3.58 | 220 | A. |
| pril | 7.79 | 464 | A. | April | 9.27 | 552 | A. |
| lay | 11.58 | 712 | A. | May | 9.29 | 571 | A. |
| une | 9.44 | 562 | A. | June | 6.94 | 413 | A. |
| uly | 9.76 | 600 | A. | July | 7.95 | 489 | A. |
| ugust | 8.91 | 548 | A. | August | 7.20 | 443 | A. |
| eptember | 9.20 | 547 | A. | September | 7.50 | 446 | A. |
| The period | ........ | 4,080 | | The year | 6.39 | 4,620 | |
| 1907–8. | | | | 1908. | | | |
| October | 6.63 | 408 | A. | October | 6.76 | 416 | A. |
| November | 3.16 | 188 | A. | November | 5.22 | 311 | A. |
| December | 2.79 | 172 | A. | December | 2.65 | 163 | A. |

# [illegible] OF CA[illegible] PART III.

[illegible] 1399–[illegible]

[illegible]

### MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the San Diego River basin:

*Miscellaneous measurements in San Diego River drainage basin.*

| Date. | Stream. | Locality. | Gage height. | Discharge. |
|---|---|---|---|---|
| | | | *Feet.* | *Sec.-ft.* |
| Nov. 23, 1905 | San Diego River | Head of San Diego Flume Co.'s flume | ........ | 1.9 |
| May 1, 1912 | .....do | Diverting dam just below junction of Boulder Creek, NE. ¼ NE. ¼ sec. 11, T. 1 S., R. 2 E. | 2.00 | 22 |
| May 1, 1912 | .....do | Old Mission Dam, about 3 miles west of Santee. | 7.66 | 33 |
| May 5, 1912 | .....do | .....do | 7.47 | 23 |
| May 11, 1912 | .....do | .....do | 8.79 | 126 |
| May 25, 1912 | .....do | .....do | 7.39 | 14 |
| June 6, 1912 | .....do | .....do | 7.15 | .2 |
| May 1, 1912 | .....do | About 2½ miles east of San Diego | 1.00 | 39 |
| May 4, 1912 | .....do | .....do | .99 | 34 |
| May 20, 1912 | .....do | .....do | .99 | 25 |
| May 25, 1912 | .....do | .....do | .82 | 13 |
| June 6, 1912 | .....do | .....do | .45 | [a].1 |
| May 1, 1912 | San Diego flume | Diverting dam in NE. ¼ NE. ¼ sec. 11, T. 14 S., R. 2 E. | 1.71 | 40 |
| May 24, 1912 | .....do | .....do | .50 | 4.6 |
| May 24, 1912 | .....do | .....do | .68 | 8.2 |
| May 24, 1912 | .....do | .....do | .96 | 16.5 |
| May 24, 1912 | .....do | .....do | 1.19 | 22 |
| May 24, 1912 | .....do | .....do | 1.67 | 40 |
| May 24, 1912 | .....do | .....do | 1.92 | 8.4 |
| May 6, 1912 | San Vicente Creek | One-half mile above Foster | ........ | 2.1 |

[a] Estimated.

## SAN DIEGUITO RIVER[1] BASIN.

### SANTA YSABEL CREEK NEAR ESCONDIDO, CAL.

This station, which is located at the mouth of the narrow canyon at the upper end of the San Pasqual Valley, in the SW. ¼ sec. 31, T. 12 S., R. 1 E., 9 miles southeast of Escondido, was established December 17, 1905.

Roden Canyon Creek and Temescal Creek, tributaries from the north, enter Santa Ysabel Creek 1½ and 5 miles, respectively, above the gaging station. Santa Maria Creek enters from the south 4 miles below the gaging station.

No water is diverted from this stream above the gaging station. Within half a mile below the station, in the San Pasqual Valley, are two small irrigation canals. A third canal, with a capacity of about 45 second-feet, heads about 1 mile below the station, and about 2 miles below is a fourth, with a capacity of about 25 second-feet.

The gage is an inclined staff on the left bank. The datum of the gage has not been changed since the station was established. Beginning May 14, 1912, a temporary low-water section was used at datum 8.76 feet below the old datum. All gage heights have been reduced to original datum.

[1] Called Bernardo River in previous Water-Supply Papers.

[illegible]

[illegible]

| | | |
|---|---|---|
| [illegible] | [illegible] | [illegible] |

*Discharge measurements of Santa Ysabel River near Escondido, Cal., in 1905–1912*—Continued.

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|
| 1909. | *Feet.* | *Sec.-feet.* | 1910. | *Feet.* | *Sec.-ft.* |
| Mar. 28 | 1.60 | 214 | May 30 | .75 | 4.2 |
| 28 | 1.55 | 288 | June 2 | .79 | 5.7 |
| 28 | 1.51 | 191 | 8 | .77 | 3.3 |
| 29 | 1.40 | 173 | 30 | .74 | 1.3 |
| Apr. 5 | 1.40 | 115 | Nov. 25 | .80 | 2.9 |
| 10 | 1.35 | 100 | | | |
| 15 | 1.28 | 63 | 1911. | | |
| 24 | 1.23 | 44 | Feb. 7 | .80 | 59 |
| May 24 | 1.20 | 31 | Mar. 5 | .87 | 140 |
| Dec. 23 | 1.22 | 83 | Apr. 11 | .48 | 48 |
| | | | May 10 | .25 | 17 |
| 1910. | | | June 26 | .10 | 2.4 |
| Jan. 11 | .60 | 105 | Oct. 15 | .06 | a .2 |
| 31 | .51 | 66 | | | |
| Feb. 11 | .57 | 44 | 1912. | | |
| 19 | .60 | 46 | Jan. 22 | .12 | 3.7 |
| 22 | .67 | 53 | Feb. 8 | .14 | 4.2 |
| 23 | .69 | 56 | Mar. 6 | .47 | 47 |
| Mar. 6 | .72 | 31 | 8 | .26 | 22 |
| 10 | .76 | 34 | Apr. 1 | .12 | 49 |
| 22 | .80 | 39 | 12 | .75 | 266 |
| 31 | .96 | 57 | 22 | .18 | 62 |
| Apr. 4 | .94 | 42 | May 8 | .10 | 53 |
| 8 | .90 | 42 | 15 | .00 | 36 |
| 15 | .90 | 34 | 23 | b −.04 | 21 |
| 28 | .86 | 18 | June 22 | −.14 | 5.1 |
| May 5 | .87 | 20 | July 13 | −.19 | 1.0 |
| 16 | .84 | 10 | | | |

a Estimated. b Stream in two channels.

NOTE.—Beginning May 14, 1912, temporary gage was used. This reads 8.76 feet higher than old gage. All gage heights reduced to datum of old gage.

*Daily gage height, in feet, of Santa Ysabel Creek near Escondido, Cal., for 1905–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1905–6. | | | | | | | | | | |
| 1 | | 3.55 | 3.5 | 3.7 | 0.7 | 1.85 | 2.4 | 2.4 | 2.4 | 2.45 |
| 2 | | 3.5 | 3.5 | 3.65 | .9 | 1.85 | 2.4 | 2.4 | 2.45 | 2.45 |
| 3 | | 3.55 | 3.5 | 3.65 | .7 | 1.8 | 2.4 | 2.35 | 2.4 | 2.45 |
| 4 | | 3.45 | 3.5 | 3.7 | .7 | 1.8 | 2.35 | 2.4 | a 2.4 | 2.4 |
| 5 | | 3.55 | 3.5 | 3.7 | .75 | 1.9 | 2.35 | 2.35 | 2.35 | 2.45 |
| 6 | | 3.6 | 3.65 | 3.65 | .55 | 1.95 | 2.35 | 2.4 | 2.4 | 2.45 |
| 7 | | 3.55 | 3.6 | 3.65 | .4 | 1.95 | 2.35 | 2.4 | 2.4 | 2.5 |
| 8 | | 3.55 | 3.55 | 3.7 | .45 | 1.95 | 2.3 | 2.4 | 2.4 | 2.4 |
| 9 | | 3.5 | 3.6 | 3.65 | .7 | 2.0 | 2.3 | 2.35 | 2.4 | 2.45 |
| 10 | | 3.55 | 3.5 | 3.7 | .7 | 2.0 | 2.35 | 2.4 | 2.45 | 2.45 |
| 11 | | 3.55 | 3.65 | 3.7 | .7 | 2.0 | 2.3 | 2.35 | 2.4 | 2.5 |
| 12 | | 3.6 | 3.6 | 4.2 | .9 | 2.2 | 2.3 | 2.35 | 2.4 | 2.5 |
| 13 | | 3.6 | 3.6 | 4.5 | .9 | 2.2 | 2.3 | 2.4 | 2.4 | 2.5 |
| 14 | | 3.6 | 3.6 | 3.75 | 1.0 | 2.15 | 2.3 | 2.4 | 2.4 | 2.5 |
| 15 | | 3.6 | 3.9 | 3.7 | 1.0 | 2.1 | 2.35 | 2.4 | 2.45 | 2.5 |
| 16 | | 3.5 | 3.9 | 3.8 | 1.05 | 2.2 | 2.3 | 2.4 | 2.45 | 2.5 |
| 17 | 3.46 | 3.5 | 3.75 | 4.25 | 1.15 | 2.2 | 2.3 | 2.4 | 2.45 | 2.5 |
| 18 | 3.47 | 3.6 | 3.7 | 3.9 | a 1.15 | 2.2 | 2.25 | 2.4 | 2.5 | 2.5 |
| 19 | 3.47 | 3.85 | 3.7 | 3.65 | a 1.15 | 2.2 | 2.3 | 2.4 | 2.55 | 2.45 |
| 20 | 3.48 | 3.75 | 3.7 | 3.6 | a 1.15 | 2.15 | 2.3 | 2.4 | 2.45 | 2.4 |
| 21 | 3.54 | 3.6 | 3.65 | 3.55 | a 1.2 | 2.2 | 2.3 | 2.4 | 2.45 | 2.4 |
| 22 | 3.52 | 3.5 | 3.7 | 3.6 | 1.2 | 2.25 | 2.25 | 2.4 | 2.4 | a 2.4 |
| 23 | 3.50 | 3.5 | 3.7 | 3.5 | 1.3 | 2.25 | 2.2 | 2.4 | 2.4 | 2.45 |
| 24 | 3.48 | 3.55 | 3.65 | 6.3 | 1.4 | 2.3 | 2.3 | 2.4 | 2.45 | 2.45 |
| 25 | 3.49 | 3.5 | 3.65 | 3.5 | 1.45 | 2.3 | 2.4 | 2.45 | a 2.4 | 2.5 |
| 26 | 3.48 | 3.5 | 3.65 | 1.9 | 1.4 | 2.45 | 2.3 | 2.45 | 2.4 | 2.5 |
| 27 | 3.47 | 3.55 | 3.65 | .9 | 1.5 | 2.35 | 2.35 | 2.4 | 2.4 | 2.5 |
| 28 | 3.48 | 3.55 | 3.7 | .6 | 1.6 | 2.25 | 2.4 | 2.4 | 2.45 | 2.5 |
| 29 | 3.51 | 3.55 | | .8 | 1.7 | 2.3 | 2.35 | 2.4 | 2.4 | 2.5 |
| 30 | 3.52 | 3.55 | | .9 | 1.6 | 2.4 | 2.3 | 2.4 | 2.4 | 2.45 |
| 31 | 3.55 | 3.55 | | .9 | | 2.4 | | 2.4 | 2.45 | |

a Estimated.

*[illegible] gage height, in feet, of [illegible] Creek near [illegible], [illegible]*

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Santa Ysabel Creek near Escondido, Cal., for 1906–1912—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908-9. | | | | | | | | | | | | |
| 1 | 1.6 | 1.7 | 1.73 | 1.8 | 0.55 | 1.0 | 1.3 | 1.2 | 1.15 | 1.15 | 1.05 | 0.95 |
| 2 | 1.6 | 1.7 | 1.8 | 1.8 | .55 | 1.0 | 1.3 | 1.2 | 1.15 | 1.15 | 1.0 | 1.0 |
| 3 | 1.65 | 1.65 | 1.9 | 1.8 | .55 | 1.05 | 1.3 | 1.2 | 1.15 | 1.15 | 1.05 | 1.0 |
| 4 | 1.7 | 1.65 | 1.8 | 1.8 | .9 | 1.1 | 1.3 | 1.2 | 1.15 | 1.1 | 1.05 | 1.0 |
| 5 | 1.7 | 1.7 | 1.8 | 1.8 | .7 | 1.1 | 1.4 | 1.2 | 1.15 | 1.1 | 1.05 | 1.0 |
| 6 | 1.7 | 1.7 | 1.8 | 1.85 | .65 | 1.15 | 1.35 | 1.2 | 1.15 | 1.15 | 1.0 | 1.1 |
| 7 | 1.65 | 1.7 | 1.8 | 1.85 | .73 | 1.2 | 1.3 | 1.2 | 1.2 | 1.15 | 1.05 | 1.1 |
| 8 | 1.6 | 1.7 | 1.8 | 1.85 | 1.15 | 1.2 | 1.3 | 1.2 | 1.15 | 1.1 | 1.05 | 1.05 |
| 9 | 1.6 | 1.7 | 1.8 | 1.85 | .8 | 1.2 | 1.3 | 1.2 | 1.15 | 1.1 | 1.05 | 1.0 |
| 10 | ...... | 1.7 | 1.8 | 1.85 | .9 | 1.15 | 1.35 | 1.2 | 1.15 | 1.1 | 1.05 | 1.0 |
| 11 | ...... | 1.7 | 1.8 | 1.8 | 1.05 | 1.2 | 1.3 | 1.2 | 1.15 | 1.1 | 1.0 | 1.0 |
| 12 | 1.65 | 1.7 | 1.73 | 1.85 | 1.2 | 1.25 | 1.25 | 1.2 | 1.15 | 1.1 | 1.0 | 1.0 |
| 13 | 1.7 | 1.7 | 1.73 | 2.1 | 1.3 | 1.2 | 1.25 | 1.2 | 1.15 | 1.1 | 1.0 | .95 |
| 14 | 1.65 | 1.7 | 1.73 | 2.35 | 1.1 | 1.25 | 1.3 | 1.2 | 1.15 | 1.05 | .95 | .95 |
| 15 | 1.7 | 1.7 | 1.8 | 1.9 | 1.0 | 1.2 | 1.3 | 1.2 | 1.15 | 1.05 | 1.0 | .95 |
| 16 | 1.7 | 1.7 | 1.8 | 1.85 | .9 | 1.2 | 1.25 | 1.2 | 1.15 | 1.05 | 1.0 | .9 |
| 17 | 1.75 | 1.7 | 1.8 | 1.85 | 1.9 | 1.25 | 1.35 | 1.2 | 1.1 | 1.05 | 1.0 | ...... |
| 18 | 1.8 | 1.75 | 1.8 | 1.85 | 1.0 | 1.2 | 1.35 | 1.2 | 1.1 | 1.1 | 1.0 | ...... |
| 19 | 1.75 | 1.75 | 1.8 | 1.85 | 1.0 | 1.3 | 1.25 | 1.2 | 1.15 | 1.1 | 1.0 | ...... |
| 20 | 1.7 | 1.7 | 1.8 | 1.85 | .9 | 1.35 | 1.35 | 1.2 | 1.15 | 1.0 | 1.0 | ...... |
| 21 | 1.7 | 1.7 | 1.85 | 2.05 | 1.4 | 1.3 | 1.35 | 1.2 | 1.1 | .95 | .95 | ...... |
| 22 | 1.7 | 1.7 | 1.85 | 4.05 | 1.0 | 1.35 | 1.25 | 1.2 | 1.15 | 1.0 | 1.0 | ...... |
| 23 | 1.7 | 1.75 | 1.8 | 1.4 | .9 | 1.5 | 1.35 | 1.2 | 1.15 | 1.05 | .95 | ...... |
| 24 | 1.7 | 1.75 | 1.8 | .8 | .95 | 1.45 | 1.35 | 1.2 | 1.15 | 1.0 | 1.0 | 1.0 |
| 25 | 1.7 | 1.75 | 1.8 | .75 | .95 | 1.4 | 1.25 | 1.2 | 1.15 | 1.0 | 1.0 | 1.05 |
| 26 | 1.65 | 1.75 | 1.8 | .75 | .95 | 1.4 | 1.2 | 1.15 | 1.15 | 1.05 | 1.0 | 1.05 |
| 27 | 1.65 | 1.75 | 1.8 | .9 | .95 | 1.8 | 1.25 | 1.15 | 1.15 | 1.1 | 1.0 | 1.05 |
| 28 | 1.65 | 1.7 | 1.8 | .75 | .95 | 1.6 | 1.25 | 1.15 | 1.1 | 1.05 | .95 | 1.05 |
| 29 | 1.7 | 1.75 | 1.8 | .65 | ...... | 1.4 | 1.2 | 1.2 | 1.1 | 1.05 | .0 | 1.05 |
| 30 | 1.7 | 1.75 | 1.8 | .6 | ...... | 1.35 | 1.2 | 1.15 | 1.1 | 1.05 | 1.05 | 1.05 |
| 31 | 1.7 | ...... | 1.8 | .6 | ...... | 1.35 | ...... | 1.15 | ...... | 1.05 | 1.15 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | |
| 1 | 1.06 | 1.06 | 1.2 | 2.40 | 0.52 | 0.73 | 0.94 | 0.88 | 0.78 | 0.70 |
| 2 | 1.06 | 1.0 | 1.2 | 1.60 | .52 | .72 | .94 | .87 | .79 | .66 |
| 3 | 1.05 | 1.0 | 1.2 | 1.42 | .53 | .72 | .94 | .86 | .79 | .64 |
| 4 | 1.06 | 1.0 | 1.2 | 1.20 | .53 | .71 | .94 | .85 | .79 | .63 |
| 5 | 1.1 | 1.0 | 1.26 | .95 | .53 | .71 | .93 | .86 | .79 | .62 |
| 6 | 1.05 | 1.0 | 1.35 | .70 | .52 | .72 | .93 | .85 | .79 | .64 |
| 7 | 1.06 | 1.0 | 1.3 | .68 | .51 | .72 | .92 | .84 | .79 | .63 |
| 8 | 1.0 | 1.06 | 1.26 | .66 | .52 | .71 | .92 | .83 | .79 | .62 |
| 9 | 1.0 | 1.05 | 1.9 | .66 | .52 | .72 | .92 | .82 | .77 | ...... |
| 10 | 1.0 | 1.1 | 1.55 | .64 | .52 | .72 | .91 | .82 | .76 | ...... |
| 11 | 1.0 | 1.15 | 1.35 | .60 | .57 | .73 | .92 | .83 | .74 | ...... |
| 12 | 1.0 | 1.15 | 1.3 | .60 | .53 | .73 | 1.03 | .83 | .75 | ...... |
| 13 | 1.0 | 1.1 | 1.3 | .60 | .54 | .74 | 1.02 | .82 | .76 | ...... |
| 14 | 1.0 | 1.1 | 1.3 | .57 | .55 | .73 | 1.01 | .82 | .77 | ...... |
| 15 | 1.0 | 1.26 | 1.25 | .60 | .56 | .74 | 1.00 | .82 | .77 | ...... |
| 16 | 1.0 | 1.15 | 1.25 | .90 | .60 | .75 | .98 | .82 | .78 | ...... |
| 17 | 1.0 | 1.1 | 1.26 | .70 | .58 | .77 | .98 | .82 | .76 | ...... |
| 18 | 1.06 | 1.1 | 1.26 | .60 | .60 | .77 | .98 | .81 | .76 | ...... |
| 19 | 1.06 | 1.1 | 1.26 | .58 | .70 | .77 | .97 | .80 | .77 | ...... |
| 20 | 1.06 | 1.1 | 1.4 | .55 | .80 | .78 | .95 | .80 | .75 | ...... |
| 21 | 1.0 | 1.1 | 2.4 | .53 | .75 | .78 | .92 | .80 | .73 | ...... |
| 22 | 1.0 | 1.1 | 1.26 | .52 | .73 | .79 | .90 | .82 | .74 | ...... |
| 23 | 1.0 | 1.1 | 1.3 | .52 | .72 | .80 | .84 | .81 | .74 | ...... |
| 24 | 1.0 | 1.15 | 1.25 | .52 | .73 | .80 | .86 | .81 | .73 | ...... |
| 25 | 1.0 | 1.1 | 1.2 | .52 | .72 | .80 | .87 | .81 | .71 | ...... |
| 26 | 1.0 | 1.25 | 1.15 | .52 | .72 | .81 | .88 | .80 | .70 | ...... |
| 27 | 1.0 | 1.2 | 1.15 | .52 | .75 | .90 | .89 | .79 | .68 | ...... |
| 28 | 1.0 | 1.2 | 1.15 | .52 | .74 | 1.30 | .86 | .76 | .67 | ...... |
| 29 | 1.06 | 1.15 | 1.1 | .52 | ...... | 1.09 | .87 | .77 | .66 | ...... |
| 30 | 1.06 | 1.2 | 1.1 | .52 | ...... | .94 | .89 | .77 | .70 | ...... |
| 31 | 1.06 | ...... | 1.1 | .52 | ...... | .97 | ...... | ...... | ...... | ...... |

[illegible] 1905–1912—[illegible]

| [illegible] | July |
| --- | --- |
| [illegible] | [illegible] |

*...ily discharge, in second-feet, of Santa Ysabel Creek near Escondido, Cal., for 1910–1912.*

| ...y. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ...10. | | | | | | | | 1910. | | | | | | | |
| .... | 3,100 | 64 | 45 | [illegible] | 35 | [illegible] | [illegible] | 16. | 540 | 45 | 37 | 49 | 10 | 2 | |
| .... | 1,320 | 62 | 42 | 47 | 35 | 4 | [illegible] | 17.... | 271 | 46 | [illegible] | 48 | 10 | 2 | |
| .... | 1,020 | 60 | 38 | 44 | 38 | [illegible] | [illegible] | 18.... | 205 | 46 | [illegible] | 47 | 9 | 2 | |
| .... | 690 | 58 | 35 | 42 | 38 | [illegible] | [illegible] | 19.... | 186 | 46 | 38 | 43 | 8 | 2 | |
| .... | 390 | 56 | 33 | 42 | 38 | 4 | [illegible] | 20.... | 86 | 45 | 38 | 40 | 7 | 2 | |
| .... | 170 | 54 | 32 | 42 | 35 | 4 | [illegible] | 21.... | 79 | 50 | 38 | 33 | 7 | 2 | |
| .... | 155 | 52 | 32 | 42 | 16 | 3 | [illegible] | 22.... | 65 | 53 | 39 | 29 | 7 | 2 | |
| .... | 155 | 50 | 32 | 42 | 17 | 3 | [illegible] | 23.... | 65 | 56 | 40 | 19 | 6 | 1 | |
| .... | 140 | 48 | 33 | 46 | 14 | 3 | | 24.... | 65 | 58 | 40 | 21 | 6 | 1 | |
| .... | 125 | 48 | 34 | 42 | 13 | 3 | | 25.... | 65 | 54 | 40 | 22 | 6 | 1 | |
| .... | 106 | 44 | 35 | 42 | 14 | 3 | | 26.... | 65 | 52 | 42 | 22 | 5 | 1 | |
| .... | 105 | 44 | 35 | 62 | [illegible] | 3 | | 27.... | 65 | 53 | 51 | 23 | 5 | 1 | |
| .... | 106 | 44 | 36 | 60 | [illegible] | 3 | | 28.... | 65 | 40 | 90 | 18 | 4 | 1 | |
| .... | 90 | 45 | 36 | 62 | [illegible] | 3 | | 29.... | 63 | ...... | 70 | 18 | 4 | 1 | |
| .... | 105 | 45 | 36 | 51 | 16 | 3 | | 30.... | 65 | ...... | 54 | 18 | 4 | 1 | |
| | | | | | | | | 31.... | 66 | ...... | 57 | .... | 4 | | |

| Day. | Apr. | May. | June. | July. | Day. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | 1911. | | | | |
| ... | ...... | 29 | 14 | 2.4 | 16 | 35 | 17 | 8.1 | |
| ... | ...... | 22 | 12 | 2.4 | 17 | 33 | 13 | 8.9 | |
| ... | ...... | 23 | 13 | 1.9 | 18 | 38 | 10 | 6.4 | |
| ... | ...... | 25 | 14 | 2.4 | 19 | 36 | 16 | 7.8 | |
| ... | ...... | 18 | 19 | 1.9 | 20 | 35 | 8.9 | 7.8 | |
| ...6 | ...... | 17 | 19 | 1.9 | 21 | 32 | 9.7 | 9.7 | |
| ...7 | ...... | 19 | 5.9 | ...... | 22 | 36 | 8.9 | 10 | |
| ...8 | ...... | 19 | 9.7 | ...... | 23 | 35 | 10 | 4.8 | |
| ...9 | ...... | 16 | 6.4 | ...... | 24 | 33 | 16 | 3.6 | |
| ...10 | ...... | 16 | 6.1 | ...... | 25 | 32 | 14 | 3.2 | |
| ...1 | 40 | 16 | 9.7 | ...... | 26 | 32 | 13 | 4.0 | |
| ...2 | 52 | 17 | 9.7 | ...... | 27 | 36 | 10 | 2.4 | |
| ...3 | 47 | 19 | 7.3 | ...... | 28 | 38 | 10 | 3.3 | |
| ...4 | 36 | 16 | 6.4 | ...... | 29 | 36 | 13 | 2.4 | |
| ...5 | 44 | 20 | 5.6 | ...... | 30 | 32 | 16 | 2.4 | |
| | | | | | 31 | ...... | 14 | | |

[illegible] Yankee Creek near Escondido, Cal., for 1916–1917—continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | [illegible] | 10 | [illegible] | | 46 | 38 | [illegible] |
| | | | [illegible] | 10 | | 30 | 59 | 35 | [illegible] |
| | | | [illegible] | 10 | | [illegible] | 46 | 35 | [illegible] |
| | | | [illegible] | 10 | 10 | | 46 | 35 | |
| | | | [illegible] | 10 | 10 | 20 | 46 | 25 | [illegible] |
| | | | [illegible] | | | [illegible] | 38 | 32 | [illegible] |
| | | | | | | 36 | 38 | 25 | [illegible] |
| | | | [illegible] | | | 24 | 25 | 48 | [illegible] |
| | | | [illegible] | | [illegible] | 30 | 46 | 70 | [illegible] |
| | | | [illegible] | 10 | [illegible] | 680 | 70 | 70 | [illegible] |
| | | | [illegible] | 10 | [illegible] | 125 | 315 | 59 | [illegible] |
| | | | | | | 110 | 315 | 46 | [illegible] |
| | | | | | | 315 | [illegible] | 46 | [illegible] |
| | | | | | | 110 | 100 | 38 | [illegible] |
| | | | [illegible] | | | 110 | 100 | 25 | [illegible] |
| | | | [illegible] | [illegible] | | 110 | 100 | 22 | [illegible] |
| | | | | | | 95 | 142? | 25 | [illegible] |
| | | | | | [illegible] | 95 | 95 | 28 | [illegible] |
| | | | [illegible] | | | 95 | 82 | 19 | [illegible] |
| | | | | [illegible] | [illegible] | 95 | 70 | 19 | [illegible] |
| | | | [illegible] | [illegible] | | 95 | 58 | 19 | [illegible] |
| | | | | | | 95 | 58 | 19 | [illegible] |
| | | | | | | 82 | 58 | 19 | [illegible] |
| | | | | | | 82 | 46 | 15 | [illegible] |
| | | | [illegible] | | | 82 | 46 | 19 | [illegible] |
| | | | | | | [illegible] | 46 | 19 | [illegible] |
| | | | | | [illegible] | [illegible] | 46 | 19 | [illegible] |
| | | | | | | [illegible] | 46 | [illegible] | [illegible] |
| | | | | | | [illegible] | [illegible] | 15 | |
| | | | | | | 200? | 46 | [illegible] | [illegible] |
| | | | | | | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | Run-off | | |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | [illegible] | [illegible] | [illegible] |

*Monthly discharge of Santa Ysabel Creek near Escondido, Cal., for 1906–1912*—Contd.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1907-8.** | | | | | | | |
| October | 15 | 6 | 8.1 | .063 | .07 | 498 | |
| November | 12 | 9 | 10.2 | .080 | .09 | 607 | |
| December | 15 | 10 | 12 | .093 | .11 | 738 | |
| January | 136 | 10 | 25.6 | .200 | .23 | 1,570 | |
| February | 146 | 37 | 54.1 | .423 | .46 | 3,110 | |
| March | 82 | 20 | 37.7 | .294 | .34 | 2,320 | |
| April | 44 | 12 | 20.9 | .163 | .18 | 1,240 | |
| May | 25 | 5 | 13.7 | .107 | .12 | 842 | |
| June | 9 | 1 | 5.06 | .040 | .04 | 301 | |
| July | 1 | 0 | .129 | .0010 | .001 | 8 | |
| August | 0 | 0 | .0 | .00 | .00 | 0 | |
| September | 0 | 0 | .0 | .00 | .00 | 0 | |
| The year | 146 | 0 | 15.6 | .122 | 1.64 | 11,200 | |
| **1908-9.** | | | | | | | |
| October | 2 | 0 | .603 | .0047 | .005 | 37 | |
| November | 5 | 1 | 2.74 | .021 | .02 | 163 | |
| December | 17 | 2 | 5.65 | .044 | .05 | 347 | |
| January | 6,500 | 5 | 293 | 2.29 | 2.64 | 18,000 | |
| February | 800 | 65 | 216 | 1.69 | 1.76 | 12,000 | |
| March | 340 | 80 | 118 | .922 | 1.06 | 7,260 | |
| April | 125 | 42 | 74.8 | .584 | .65 | 4,450 | |
| May | 41 | 28 | 34.5 | .270 | .31 | 2,120 | |
| June | 27 | 14 | 23.2 | .181 | .20 | 1,380 | |
| July | 22 | 3 | 11.7 | .091 | .10 | 719 | |
| August | 20 | 0 | 5.32 | .042 | .05 | 327 | |
| September | 14 | 0 | 4.33 | .034 | .04 | 258 | |
| The year | 6,500 | 0 | 65.8 | .514 | 6.89 | 47,100 | |
| **1909-10.** | | | | | | | |
| October | 14 | 4 | 5.87 | .046 | .05 | 361 | |
| November | 52 | 4 | 17.1 | .134 | .15 | 1,020 | |
| December | 700 | 20 | 90.2 | .705 | .81 | 5,550 | |
| January | 3,100 | 65 | 300 | 2.34 | 2.70 | 18,400 | |
| February | 64 | 44 | 51.0 | .398 | .41 | 2,830 | |
| March | 90 | 31 | 41.3 | .323 | .37 | 2,540 | |
| April | 62 | 18 | 39.1 | .305 | .34 | 2,330 | |
| May | 20 | 4 | 11.4 | .089 | .10 | 701 | |
| June | 6 | 1 | 2.6 | .020 | .02 | 155 | |
| July | 1 | 0 | .16 | .001 | .001 | 10 | |
| August | 0 | 0 | .0 | .0 | .0 | 0 | |
| September | 0 | 0 | .0 | .0 | .0 | 0 | |
| The year | 3,100 | 0 | 46.6 | .364 | 4.95 | 33,900 | |
| **1910-11.** | | | | | | | |
| October | 0 | 0 | .0 | .0 | .0 | 0 | |
| November | 0 | 0 | .0 | .0 | .0 | 0 | |
| December | 0 | 0 | .0 | .0 | .0 | 0 | |
| April 11-30 | 52 | 32 | 37.2 | .291 | .22 | 1,480 | B. |
| May | 29 | 8.9 | 15.8 | .123 | .14 | 972 | B. |
| June | 16 | 2.4 | 7.82 | .061 | .07 | 465 | B. |
| July | 2.4 | .0 | .39 | .003 | .004 | 24 | D. |
| August | .0 | .0 | .0 | .0 | .0 | 0 | |
| September | .0 | .0 | .0 | .0 | .0 | 0 | |
| **1911-12.** | | | | | | | |
| October | ........... | 0 | .032 | .0003 | .00 | 2.0 | D. |
| November | 6.4 | 0 | 2.06 | .016 | .02 | 123 | C. |
| December | 12 | 1.9 | 5.60 | .044 | .05 | 344 | B. |
| January | 10 | 5 | 7.65 | .060 | .07 | 470 | B. |
| February | 10 | 2 | 5.03 | .039 | .04 | 289 | B. |
| March | 630 | 5 | 10.4 | .813 | .94 | 6,400 | B. |
| April | 315 | 28 | 89.5 | .699 | .78 | 5,330 | B. |
| May | 70 | 10 | 30.3 | .237 | .27 | 1,860 | B. |
| June | 19 | 6 | 8.57 | .067 | .07 | 510 | B. |
| The period | ........... | ........... | ........... | ........... | ........... | 15,300 | |

NOTE.—Discharge 1906-1909 determined by the indirect method of shifting channels. Values are approximate.

[illegible]

[illegible] 4 miles nort[illegible]
[illegible] was establi[illegible]
[illegible] gage station kn[illegible]
[illegible] h of the can[illegible]
[illegible] on the left bank. [illegible]
[illegible] shifting. Disch[illegible]
[illegible] table at the gage. Re[illegible]
[illegible] with the W[illegible]

[illegible]

| Day. | Feb. | Mar. |
|---|---|---|
| 16. | 0.29 | 0.82 |
| 17. | .27 | [illegible] |
| 18. | .27 | [illegible] |
| 19. | .27 | [illegible] |
| 20. | .27 | [illegible] |
| 21. | .29 | .60 |
| 22. | .28 | [illegible] |
| 23. | .27 | .53 |
| 24. | .27 | .53 |
| 25. | .27 | .50 |
| 26. | .27 | .59 |
| 27. | .27 | 1.09 |
| 28. | .27 | .80 |
| 29. | .23 | .90 |
| 30. | | [illegible] |
| 31. | | 1.10 |

NOTE.—Gage height Mar. [illegible], Apr. 10-16, and May 7-10 [illegible]

*Daily discharge, in second-feet, of Santa Ysabel Creek near Ramona, Cal., for 1912.*

| Day. | Feb. | Mar. | Apr. | May. | June. | Day. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | ........ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 114 | [illegible] | [illegible] |
| [illegible] | ........ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ........ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ........ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 278 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | | | | | | [illegible] | | [illegible] | | [illegible] | |

NOTE.—Daily discharge determined from rating curves well defined above 3 second-feet, applicable as follows: Feb. 1 to Apr. 1, 1912, and Apr. 2 to June 30, 1912.

*Monthly discharge of Santa Ysabel Creek near Ramona, Cal., for 1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| February 1-29 | 4.5 | 1.0 | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | 108 | 10 | [illegible] | [illegible] | [illegible] |
| June | 14 | [illegible] | [illegible] | [illegible] | [illegible] |

## SAN DIEGUITO RIVER AT BERNARDO, CAL.

This station, which is located at highway bridge at Bernardo on the San Bernardo grant, about 5 miles below junction of Santa Ysabel and Santa Maria creeks, and 16 miles above the mouth of the river, was established April 17, 1911.

A chain gage is fastened to the highway bridge. The length of the chain is 23.18 feet.

The channel is fine shifting sand.

Discharge measurements are made by wading near gage. A car and cable will be installed for use at high stages.

The results are considered good.

East and West San Pasqual ditches divert water for irrigation from the Santa Ysabel at the upper end of San Pasqual Valley. Water for irrigation is also pumped from wells along the river.

The station is maintained in cooperation with the Volcan Land & Water Co. through W. S. Post, engineer.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Note.—[illegible] Mar. 6, 8, 10, 12, 26, 30, Apr. 10–15, and May 7–10 determined by means of a [illegible] Luis Rey River near Mesa Grande. Observer reads gage several times [illegible]

*Daily discharge, in second-feet, of Santa Ysabel Creek near Ramona, Cal., for 1912.*

| Day. | Feb. | Mar. | Apr. | May. | June. | Day. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 3.5 | 39 | 34 | 14 | 16 | 3.4 | 38 | [illegible] | 30 | 11 |
| 2 | | [illegible] | 32 | 34 | 14 | 17 | 3.2 | 35 | [illegible] | 35 | 9 |
| 3 | | 3.5 | 43 | 34 | 14 | 18 | 3.2 | 38 | 58 | 24 | 7.2 |
| 4 | | 24 | 40 | 31 | 12 | 19 | 3.2 | 24 | 75 | 22 | 9.8 |
| 5 | 4 | 17 | 40 | 31 | 12 | 20 | 3.2 | 12 | 60 | 20 | 6.3 |
| 6 | 4 | [illegible] | 36 | 30 | 12 | 21 | 3.7 | 19 | 50 | 20 | 5.8 |
| 7 | 4 | 39 | 30 | 45 | 12 | 22 | 3.4 | 21 | 53 | 20 | 5.5 |
| 8 | 4 | 21 | 37 | 32 | 11 | 23 | 3.1 | 16 | 47 | 20 | 6.3 |
| 9 | 4.5 | 71 | 42 | 106 | 10 | 24 | 3.2 | 16 | 43 | 20 | 6.8 |
| 10 | 4.5 | 278 | 46 | 30 | 11 | 25 | 3.2 | 13 | 42 | 19 | 5.8 |
| 11 | 4.5 | 54 | 228 | 48 | 12 | 26 | 3.1 | 44 | 40 | 20 | 4.3 |
| 12 | 4.5 | 32 | 252 | 58 | 11 | 27 | 3.1 | 33 | 40 | 20 | 3.9 |
| 13 | 4 | 282 | 265 | 30 | 11 | 28 | 3.1 | 36 | 40 | 19 | 3.3 |
| 14 | 4 | 40 | 196 | 40 | 12 | 29 | 1.9 | 45 | 58 | 17 | 3.0 |
| 15 | 4 | 44 | 133 | 34 | 11 | 30 | ... | 122 | 56 | 18 | 3.8 |
| | | | | | | 31 | ... | 73 | ... | 16 | ... |

NOTE.—Daily discharge determined from rating curves well defined above 3 second-feet, applicable as follows: Feb. 5 to Apr. 11, 1912, and Apr. 12 to June 30, 1912.

*Monthly discharge of Santa Ysabel Creek near Ramona, Cal., for 1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| February 5-29 | 4.5 | 1.9 | 3.62 | 180 | A. |
| March | 278 | 9.3 | 48.7 | 2,990 | A. |
| April | 252 | 30 | 75.0 | 4,460 | A. |
| May | 106 | 16 | 33.4 | [illegible] | A. |
| June | 14 | 3.3 | 9.06 | 539 | A. |

## SAN DIEGUITO RIVER AT BERNARDO, CAL.

This station, which is located at highway bridge at Bernardo on the San Bernardo grant, about 5 miles below junction of Santa Ysabel and Santa Maria creeks, and 16 miles above the mouth of the river, was established April 17, 1911.

A chain gage is fastened to the highway bridge. The length of the chain is 23.18 feet.

The channel is fine shifting sand.

Discharge measurements are made by wading near gage. A car and cable will be installed for use at high stages.

The results are considered good.

East and West San Pasqual ditches divert water for irrigation from the Santa Ysabel at the upper end of San Pasqual Valley. Water for irrigation is also pumped from wells along the river.

The station is maintained in cooperation with the Volcan Land & Water Co. through W. S. Post, engineer.

### MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the San Dieguito River basin:

*Miscellaneous measurements in San Dieguito River drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| May 2, 1912. | East side San Pasqual ditch. | Sand box, 9 miles from Escondido, N. W. ¼ sec. 36 T. 12 S., R. 1 W. | 12.1 |
| June 8, 1912. | .....do | .do | 3.5 |
| June 22, 1912. | .....do | .do | 2.9 |
| May 2, 1912. | West side San Pasqual ditch. | N. E. ¼ sec. 34, T. 12 S., R. 1 W. | 11.1 |
| May 15, 1912. | .....do | .do | 7.0 |
| May 23, 1912. | .....do | .do | 9.0 |
| June 23, 1912. | .....do | .do | .9 |

## SAN LUIS REY RIVER BASIN.

### SAN LUIS REY RIVER AT DIVERSION FLUME.

Measurements of the flow of San Luis Rey River at a diversion flume in sec. 23, T. 10 S., R. 1 E., were made in 1894 and 1895, and the daily discharge of the river, supposedly at this same point, has been computed for 1896 to 1899, although it is not definitely known that the records for 1899 refer to the point of measurement in 1894-95.

*Discharge measurements of San Luis Rey River at diversion flume in 1894-95.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1894. | | *Sec-ft.* | 1895. | | *Sec-ft.* |
| May — | E. F. Tabor | [a] 6,720 | Mar. 8 | E. F. Tabor | 152 |
| Oct. — | .....do | 4 | Apr. 11 | .....do | 100 |
| Dec. 8 | .....do | 10 | 17 | .....do | 72 |
| 20 | .....do | 240 | May 10 | .....do | 39 |
| | | | 19 | .....do | 19 |
| 1895. | | | | | |
| Jan. 15 | E. F. Tabor | [a] 5,000 | | | |

[a] Estimated.

NOTE.—The point of measurement is in sec. 23, T. 10 S., R. 1 E.

*Discharge measurements of San Dieguito River at Bernardo, Cal., in 1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1912 | | *Feet.* | *Sec.-ft.* | 1912 | | *Feet.* | *Sec.-ft.* |
| Apr. 17 | F. C. Ebert | 10.29 | 125 | May 23 | F. C. Ebert | 9.51 | 16 |
| 22 | H. L. Davis | 9.92 | 66 | June 8 | W. S. Post | 9.19 | .63 |
| May 2 | F. C. Ebert | 9.48 | 14 | 23 | E. W. Case | 9.15 | .23 |
| 8 | do | 9.88 | 53 | July 1 | F. C. Ebert | 9.11 | [a].2 |
| 15 | E. W. Case | 9.60 | 37 | 13 | do | 9.10 | [a].1 |

[a] Estimated.

NOTE.—All gage heights refer to datum of chain gage installed May 23, 1912.

*Daily gage height, in feet, of San Dieguito River at Bernardo, Cal., for 1912.*

| Day. | Apr. | May. | June. | Day. | Apr. | May. | June. | Day. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 9.56 | 9.19 | 11 | | 10.2 | 9.2 | 21 | 10.0 | 9.55 | 9.16 |
| 2 | | 9.45 | 9.18 | 12 | | 10.08 | 9.2 | 22 | 9.92 | 9.58 | 9.16 |
| 3 | | 9.35 | 9.19 | 13 | | 10.0 | 9.19 | 23 | 9.9 | 9.44 | 9.16 |
| 4 | | 9.25 | 9.21 | 14 | | 9.91 | 9.19 | 24 | 9.85 | 9.32 | 9.15 |
| 5 | | 9.22 | 9.21 | 15 | | 9.78 | 9.19 | 25 | 9.82 | 9.31 | 9.15 |
| 6 | | 9.24 | 9.19 | 16 | | 9.68 | 9.19 | 26 | 9.75 | 9.29 | 9.14 |
| 7 | | 9.66 | 9.19 | 17 | 10.3 | 9.61 | 9.19 | 27 | 9.74 | 9.25 | 9.14 |
| 8 | | 9.92 | 9.2 | 18 | 10.21 | 9.55 | 9.16 | 28 | 9.72 | 9.25 | 9.14 |
| 9 | | 10.6 | 9.2 | 19 | 10.11 | 9.6 | 9.16 | 29 | 9.69 | 9.26 | 9.12 |
| 10 | | 10.3 | 9.2 | 20 | 10.04 | 9.6 | 9.16 | 30 | 9.68 | 9.22 | 9.12 |
| | | | | | | | | 31 | | 9.22 | |

NOTE.—All gage heights refer to datum of chain gage installed May 23, 1912.

*Daily discharge, in second-feet, of San Dieguito River at Bernardo, Cal., for 1912.*

| Day. | Apr. | May. | June. | Day. | Apr. | May. | June. | Day. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 20 | 0.7 | 11 | | 107 | 0.8 | 21 | 71 | 19 | 0.3 |
| 2 | | 12 | .5 | 12 | | 85 | .8 | 22 | 59 | 21 | .3 |
| 3 | | 6.5 | .7 | 13 | | 71 | .7 | 23 | 56 | 11 | .3 |
| 4 | | 2.1 | 1.0 | 14 | | 58 | .7 | 24 | 50 | 5.0 | .3 |
| 5 | | 1.3 | 1.0 | 15 | | 41 | .7 | 25 | 46 | 4.5 | .3 |
| 6 | | 1.8 | .7 | 16 | | 30 | .7 | 26 | 38 | 3.6 | .3 |
| 7 | | 28 | .7 | 17 | 127 | 24 | .7 | 27 | 36 | 2.1 | .3 |
| 8 | | 59 | .8 | 18 | 109 | 19 | .3 | 28 | 34 | 2.1 | .3 |
| 9 | | 192 | .8 | 19 | 90 | 23 | .3 | 29 | 31 | 2.5 | .2 |
| 10 | | 127 | .8 | 20 | 78 | 23 | .3 | 30 | 30 | 1.3 | .2 |
| | | | | | | | | 31 | | 1.3 | |

NOTE.—Daily discharge determined from a fairly well-defined rating curve.

*Monthly discharge of San Dieguito River at Bernardo, Cal., for 1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1912. | | | | | |
| Apr. 17-30 | 127 | 30 | 61.1 | 1,700 | B. |
| May | 192 | 1.3 | 32.4 | 1,990 | B. |
| June | 1.0 | .2 | .55 | 32.7 | B. |

### MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the San Dieguito River basin:

*Miscellaneous measurements in San Dieguito River drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| May 2, 1912.. | East side San Pasqual ditch.. | Sand box, 9 miles from Escondido, N. W. ¼ sec. 36 T. 12 S., R. 1 W. | 12.1 |
| June 8, 1912.. | .....do | .....do | 3.5 |
| June 22, 1912. | .....do | .....do | 2.9 |
| May 2, 1912... | West side San Pasqual ditch. | N. E. ¼ sec. 34, T. 12 S., R. 1 W | 11.1 |
| May 15, 1912. | .....do | .....do | 7.0 |
| May 23, 1912. | .....do | .....do | 9.0 |
| June 23, 1912. | .....do | .....do | .9 |

## SAN LUIS REY RIVER BASIN.

### SAN LUIS REY RIVER AT DIVERSION FLUME.

Measurements of the flow of San Luis Rey River at a diversion flume in sec. 23, T. 10 S., R. 1 E., were made in 1894 and 1895, and the daily discharge of the river, supposedly at this same point, has been computed for 1896 to 1899, although it is not definitely known that the records for 1899 refer to the point of measurement in 1894-95.

*Discharge measurements of San Luis Rey River at diversion flume in 1894-95.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1894. | | *Sec.-ft.* | 1895. | | *Sec.-ft.* |
| May — | E. F. Tabor | a 6,750 | Mar. 4 | E. F. Tabor | 170 |
| Oct. — | .....do | 4 | Apr. 11 | .....do | 100 |
| Dec. 8 | .....do | 10 | 17 | .....do | 72 |
| 20 | .....do | 240 | May [illegible] | .....do | [illegible] |
| | | | 19 | .....do | [illegible] |
| 1895. | | | | | |
| Jan. 15 | E. F. Tabor | a 5,000 | | | |

a Estimated.

NOTE.—The point of measurement is in sec. 23, T. 10 S., R. 1 E.

[illegible]

[illegible]

[illegible]

*Daily discharge, in second-feet, of San Luis Rey River in canyon, California, for 1899.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0 | 3.0 | 5.6 | 10.9 | (a) | 10.0 | (a) | (a) | (a) | (a) | 0.0 | 0.0 |
| 2 | .0 | 20.0 | 5.3 | 9.3 | | 10.0 | | | | | .0 | .0 |
| 3 | .0 | 33.0 | 5.0 | 9.0 | | .0 | | | | | .0 | .0 |
| 4 | .0 | 13.3 | 4.7 | 8.6 | | .0 | | | | | .0 | .0 |
| 5 | .0 | 14.9 | 4.1 | 8.1 | | .0 | | | | | .0 | .0 |
| 6 | .0 | 10.1 | 3.6 | 7.8 | | .0 | | | | | .0 | .0 |
| 7 | .0 | 10.2 | 3.6 | 7.3 | | .0 | | | | | .0 | .0 |
| 8 | .0 | 10.2 | 3.6 | 6.5 | | .0 | | | | | .0 | .0 |
| 9 | .0 | 9.3 | 3.6 | 6.2 | | .0 | | | | | .0 | .0 |
| 10 | .0 | 9.0 | 3.6 | 5.9 | | .0 | | | | | .0 | .0 |
| 11 | 24.0 | 8.6 | 3.6 | 5.3 | | .0 | | | | | .0 | .0 |
| 12 | .0 | 7.8 | 3.6 | 4.9 | | .0 | | | | | .0 | .0 |
| 13 | .0 | 7.8 | 3.6 | 4.6 | | .0 | | | | | .0 | .0 |
| 14 | 10.0 | 7.8 | 3.6 | 4.4 | | .0 | | | | | .0 | .0 |
| 15 | .0 | 7.8 | 3.6 | 4.1 | | .0 | | | | | .0 | .0 |
| 16 | 6.0 | 7.3 | 3.6 | 3.9 | | .0 | | | | | .0 | 2.0 |
| 17 | 6.0 | 6.9 | 24.4 | 3.6 | | .0 | | | | | .0 | .0 |
| 18 | 6.0 | 5.9 | 24.4 | .0 | | .0 | | | | | .0 | 4.8 |
| 19 | 5.6 | 5.6 | 11.7 | .0 | | .0 | | | | | .0 | 3.6 |
| 20 | 5.3 | 5.3 | 11.7 | .0 | | .0 | | | | | .0 | .0 |
| 21 | 4.9 | 4.9 | 25.0 | .0 | | .0 | | | | | .0 | .0 |
| 22 | 4.7 | 4.7 | 18.5 | .0 | | .0 | | | | | .0 | .0 |
| 23 | 3.0 | 4.7 | 13.3 | .0 | | .0 | | | | | 3.0 | .0 |
| 24 | 3.6 | 16.8 | 11.7 | .0 | | .0 | | | | | .0 | .0 |
| 25 | 3.6 | 10.1 | 10.9 | .0 | | .0 | | | | | .0 | 2.6 |
| 26 | 3.6 | 7.5 | 19.5 | 4.7 | | .0 | | | | | .0 | .0 |
| 27 | 3.4 | 6.6 | 11.7 | 4.1 | | .0 | | | | | .0 | .0 |
| 28 | 3.0 | 5.9 | 10.9 | .0 | | .0 | | | | | .0 | .0 |
| 29 | 3.0 | | 17.8 | .0 | | .0 | | | | | .0 | .0 |
| 30 | 3.0 | | 15.1 | .0 | | .0 | | | | | .0 | 7.2 |
| 31 | 3.0 | | 11.7 | | | | | | | | | 5.4 |

a River dry for month.

## SAN LUIS REY RIVER NEAR MESA GRANDE, CAL.

This station, which is located on a concrete weir in the NE. ¼ sec. 9, T. 11 S., R. 2 E., 1 mile below the Warner dam site and about 5 miles north of Mesa Grande, was established October 3, 1911.

The channel is composed of sand and gravel and is somewhat shifting. The drainage area above the station is 208 square miles. Discharge measurements are made from car and cable about 1 mile above the gage or by wading. Frequent measurements are secured and results are good.

The station is maintained in cooperation with the Volcan Land & Water Co. through W. S. Post, engineer.

[illegible]

*Daily discharge, in second-feet, of San Luis Rey River near Mesa Grande, Cal., for 1911–12.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 1.8 | 1.8 | 1.6 | 4.3 | 4.1 | 5.8 | 37 | 24 | 5.8 |
| 2 | 1.8 | 1.7 | 1.6 | 3.4 | 4.3 | 10 | 32 | 25 | 8.2 |
| 3 | 1.8 | 1.7 | 1.6 | 3.6 | 4.7 | 7.4 | 28 | 20 | 5.2 |
| 4 | 1.7 | 1.6 | 1.7 | 4.3 | 4.5 | 25 | 25 | 20 | 5.2 |
| 5 | 1.8 | 1.6 | 1.8 | 3.6 | 4.3 | 20 | 25 | 21 | 4.5 |
| 6 | 1.8 | 1.6 | 1.8 | 4.7 | 4.1 | 119 | 25 | 21 | 4.5 |
| 7 | 1.9 | 1.7 | 2.3 | 4.7 | 3.9 | 30 | 21 | 22 | 5.8 |
| 8 | 1.7 | 1.7 | 2.0 | 4.7 | 3.9 | 17 | 17 | 70 | 4.5 |
| 9 | 1.7 | 1.8 | 2.0 | 4.7 | 3.6 | 46 | 28 | 88 | 5.8 |
| 10 | 1.7 | 1.7 | 1.8 | 4.7 | 3.6 | 790 | 42 | 42 | 5.8 |
| 11 | 1.7 | 1.7 | 1.9 | 4.7 | 4.1 | 71 | 360 | 26 | 5.8 |
| 12 | 1.7 | 1.6 | 1.9 | 5.2 | 4.3 | 113 | 392 | 24 | 5.8 |
| 13 | 1.7 | 1.7 | 1.9 | 5.2 | 4.1 | 254 | 157 | 22 | 3.6 |
| 14 | 1.7 | 1.8 | 1.8 | 4.7 | 3.9 | 84 | 148 | 18 | 2.9 |
| 15 | 1.7 | 1.7 | 1.8 | 4.7 | 3.9 | 51 | 164 | 17 | 4.5 |
| 16 | 1.7 | 1.7 | 1.8 | 4.7 | 3.6 | 46 | 162 | 16 | 3.2 |
| 17 | 1.7 | 1.7 | 3.9 | 6.8 | 3.9 | 42 | 131 | 15 | 2.2 |
| 18 | 1.7 | 1.6 | 3.9 | 5.8 | 3.4 | 34 | 102 | 15 | 2.9 |
| 19 | 1.8 | 1.6 | 3.2 | 5.8 | 3.6 | 31 | 76 | 13 | 2.6 |
| 20 | 1.8 | 1.6 | 2.8 | 5.2 | 3.2 | 31 | 58 | 13 | 2.9 |
| 21 | 1.7 | 1.6 | 3.4 | 4.7 | 3.2 | 34 | 50 | 13 | 2.2 |
| 22 | 1.8 | 1.7 | 2.0 | 4.7 | 3.4 | 37 | 43 | 13 | 2.2 |
| 23 | 2.0 | 1.7 | 2.0 | 4.7 | 3.2 | 25 | 43 | 12 | 2.9 |
| 24 | 2.0 | 1.7 | 2.3 | 4.7 | 3.2 | 25 | 34 | 12 | 2.6 |
| 25 | 2.0 | 1.7 | 2.0 | 4.7 | 3.2 | 22 | 34 | 9.2 | 2.4 |
| 26 | 2.0 | 1.7 | 1.8 | 4.7 | 2.8 | 53 | 30 | 9.2 | 2.2 |
| 27 | 2.4 | 1.7 | 1.8 | 6.3 | 3.0 | 42 | 40 | 13 | 2.0 |
| 28 | 2.3 | 1.7 | 2.6 | 4.3 | 3.0 | 32 | 30 | 7.2 | 2.2 |
| 29 | 1.7 | 1.7 | 15 | 3.9 | 3.0 | 46 | 28 | 5.8 | 2.9 |
| 30 | 1.7 | 1.6 | 4.5 | 4.1 | ........ | 145 | 24 | 8.2 | 1.5 |
| 31 | 1.7 | ........ | 4.1 | 4.1 | ........ | 48 | ........ | 7.2 | ........ |

NOTE.—Daily discharge determined from fairly well defined rating curves applicable as follows: Oct. 3, 1911, to Mar. 11, 1912, and Mar. 12 to June 30, 1912. Discharge estimated Oct. 1 and 2, 1911, and Mar. 9, 1912.

*Monthly discharge of San Luis Rey River near Mesa Grande, Cal., for 1911–12.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1911–12. | | | | | |
| October | 2.4 | 1.7 | 1.81 | 111 | C. |
| November | 1.8 | 1.6 | 1.68 | 100 | C. |
| December | 15 | 1.6 | 2.73 | 168 | C. |
| January | 6.8 | 3.4 | 4.72 | 290 | B. |
| February | 4.7 | 2.8 | 3.69 | 212 | B. |
| March | 790 | 5.8 | 75.4 | 4,640 | B. |
| April | 392 | 17 | 79.5 | 4,730 | B. |
| May | 88 | 5.8 | 20.7 | 1,270 | B. |
| June | 8.2 | 1.5 | 3.83 | 228 | B. |
| The period | .......... | .......... | .......... | 11,700 | |

## SAN LUIS REY RIVER NEAR PALA, CAL.

This station, which is located at the road crossing to Sickler's mill, 4 miles southeast of Pala, in the NW. ¼ sec. 31, T. 9 S., R. 1 W., was established October 9, 1903.

No tributaries enter the river near the gaging station. Water is diverted from the river during the winter and spring months at a point in the rough canyon about 11 miles above the station, to a

[illegible]

[illegible]

[illegible]

[illegible]

| | | | |
|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

*Discharge measurements of San Luis Rey River near Pala, Cal., in 1903–1912*—Continued.

| Date. | Gage height. | Discharge. |
|---|---|---|
| 1907. | *Feet.* | *Sec.-feet.* |
| Apr. 18 | 6.65 | 123 |
| May 6 | 6.39 | 105 |
| 8 | 6.30 | 82 |
| 23 | 5.93 | 46 |
| June 5 | 5.82 | 32 |
| 18 | 5.70 | 17 |
| July 24 | 5.40 | 3 |
| Dec. 11 | 5.73 | 15 |
| 23 | 5.60 | 9.9 |
| 1908. | | |
| Jan. 7 | 5.62 | 12 |
| 20 | 5.61 | 12 |
| 31 | 6.40 | 73 |
| Feb. 1 | 6.30 | 58 |
| 3 | 8.70 | 819 |
| 4 | 7.70 | 513 |
| 4 | 7.60 | 459 |
| 4 | 7.40 | 365 |
| 5 | 6.90 | 217 |
| 5 | 6.75 | 163 |
| 6 | 6.68 | 146 |
| 19 | 6.50 | 86 |
| 29 | 6.55 | 119 |
| Mar. 8 | 6.42 | 87 |
| 16 | 6.07 | 39 |
| 27 | 6.40 | 90 |
| Apr. 11 | 5.75 | 16 |
| 23 | 6.30 | 71 |
| 30 | 5.64 | 12 |
| May 16 | 5.81 | 21 |
| 30 | 5.58 | 9.5 |
| June 3 | 5.63 | 12 |
| 8 | 5.56 | 7.4 |
| July 12 | 5.39 | 2.6 |
| Nov. 5 | 5.55 | 5.8 |
| 28 | 5.50 | 5.3 |
| Dec. 15 | 5.60 | 8.6 |
| 28 | 5.56 | 7.8 |
| 1909. | | |
| Jan. 30 | 7.3 | 155 |
| 31 | 7.33 | 104 |
| Feb. 11 | 7.9 | 272 |
| 11 | 8.2 | 389 |
| 11 | 8.5 | 545 |
| 12 | 8.77 | 617 |
| 12 | 8.62 | 575 |
| 12 | 9.1 | 900 |
| 12 | 9.48 | 1,131 |
| 13 | 9.1 | 909 |
| 13 | 8.85 | 796 |
| 15 | 8.0 | 438 |
| Mar. 2 | 7.32 | 120 |
| 16 | 6.52 | 73 |
| Apr. 1 | 7.27 | 182 |
| 2 | 7.2 | 167 |
| 13 | 6.55 | 87 |
| May 1 | 6.13 | 44 |
| June 4 | 5.63 | 7.7 |
| 1910. | | |
| Jan. 8 | 7.55 | 164 |
| Feb. 3 | 6.93 | 102 |
| 20 | 7.10 | 141 |
| 21 | 6.85 | 109 |
| 21 | 6.78 | 103 |
| Mar. 8 | 6.40 | 43 |
| 9 | 6.37 | 42 |
| 29 | 7.30 | 177 |
| Apr. 11 | 6.54 | 60 |
| 12 | 6.74 | 83 |
| 12 | 6.80 | 95 |
| 13 | 6.70 | 76 |
| 13 | 6.60 | 64 |
| May 3 | 6.04 | 18 |
| 4 | 6.07 | 20 |
| 11 | 5.81 | 11 |
| 31 | 5.72 | 8.4 |
| June 28 | 5.67 | 5.7 |
| Sept. 20 | 5.62 | 3.9 |
| Nov. 23 | 5.72 | 6.9 |
| 1911. | | |
| Feb. 5 | 7.50 | 266 |
| 6 | 7.20 | 200 |
| Mar. 6 | 7.20 | 161 |
| Apr. 12 | 6.30 | 43 |
| May 11 | 5.77 | 9.9 |
| June 27 | 5.72 | 6.3 |
| Oct. 14 | 5.70 | 5.8 |
| 1912. | | |
| Jan. 21 | 5.78 | 8.8 |
| Feb. 12 | 5.75 | 7.0 |
| 13 | 5.77 | 7.5 |
| Mar. 7 | 6.52 | 66 |
| 29 | 6.50 | 48 |
| Apr. 2 | 6.58 | 64 |
| 4 | 7.13 | 132 |
| May 2 | 6.33 | 38 |
| 22 | 6.08 | 18 |
| June 15 | 5.83 | 7.4 |
| 25 | 5.72 | 5.8 |
| July 12 | 5.72 | 3.3 |

*Daily gage height, in feet, of San Luis Rey River near Pala, Cal., for 1903–1911.*

| Date. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | | | | |
| 1 | ...... | 1.73 | 1.72 | 1.74 | 1.74 | 1.87 | 2.32 | 1.80 | 1.68 | ...... | ...... | ...... |
| 2 | ...... | 1.73 | 1.72 | 1.74 | 1.74 | 1.84 | 2.28 | 1.90 | 1.68 | ...... | ...... | ...... |
| 3 | ...... | 1.72 | 1.71 | 1.74 | 1.74 | 1.82 | 2.24 | 1.85 | 1.68 | ...... | ...... | ...... |
| 4 | ...... | 1.72 | 1.71 | 1.74 | 1.74 | 1.79 | 2.20 | 1.80 | 1.68 | ...... | ...... | ...... |
| 5 | ...... | 1.72 | 1.71 | 1.74 | 1.86 | 1.77 | 2.18 | 1.78 | 1.69 | ...... | ...... | ...... |
| 6 | ...... | 1.73 | 1.71 | 1.74 | 1.80 | 1.77 | 2.10 | 1.75 | 1.69 | ...... | ...... | ...... |
| 7 | ...... | 1.73 | 1.71 | 1.74 | 1.80 | 1.77 | 2.08 | 1.75 | 1.69 | ...... | ...... | ...... |
| 8 | ...... | 1.73 | 1.71 | 1.74 | 1.80 | 1.77 | 2.06 | 1.74 | 1.68 | ...... | ...... | ...... |
| 9 | 1.72 | 1.73 | 1.72 | 1.74 | 1.79 | 1.77 | 2.06 | 1.74 | 1.67 | ...... | ...... | 2.03 |
| 10 | 1.73 | 1.73 | 1.72 | 1.74 | 1.78 | 1.77 | 2.06 | 1.73 | 1.67 | ...... | ...... | ...... |
| 11 | 1.72 | 1.73 | 1.72 | 1.74 | 1.78 | 1.95 | 2.04 | 1.73 | 1.67 | ...... | ...... | ...... |
| 12 | 1.72 | 1.73 | 1.72 | 1.74 | 1.78 | 1.82 | 2.00 | 1.72 | 1.66 | ...... | ...... | ...... |
| 13 | 1.71 | 1.73 | 1.72 | 1.74 | 1.78 | 1.80 | 1.95 | 1.72 | 1.66 | ...... | ...... | ...... |
| 14 | 1.70 | 1.73 | 1.72 | 1.74 | 1.78 | 1.77 | 1.90 | 1.72 | 1.65 | ...... | ...... | ...... |
| 15 | 1.69 | 1.74 | 1.73 | 1.74 | 1.78 | 1.75 | 1.85 | 1.71 | 1.65 | ...... | ...... | ...... |

*Daily gage height, in feet, of San Luis Rey River near Pala, Cal., for 1903–1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1903–4.** | | | | | | | | | | | | |
| 16 | 1.69 | 1.73 | 1.73 | 1.74 | 1.80 | 1.75 | 1.80 | 1.71 | 1.64 | ... | ... | ... |
| 17 | 1.70 | 1.73 | 1.73 | 1.74 | 1.82 | 1.75 | 1.78 | 1.71 | 1.64 | ... | ... | ... |
| 18 | 1.70 | 1.73 | 1.73 | 1.75 | 1.80 | 1.75 | 1.78 | 1.71 | 1.65 | ... | ... | ... |
| 19 | 1.70 | 1.74 | 1.73 | 1.75 | 1.80 | 1.77 | 1.78 | 1.71 | 1.65 | ... | ... | ... |
| 20 | 1.71 | 1.74 | 1.72 | 1.75 | 1.80 | 1.82 | 1.85 | 1.71 | 1.66 | ... | ... | ... |
| 21 | 1.71 | 1.74 | 1.73 | 1.75 | 1.80 | 1.77 | 1.85 | 1.71 | 1.66 | ... | ... | ... |
| 22 | 1.72 | 1.73 | 1.73 | 1.75 | 1.79 | 1.77 | 1.80 | 1.71 | 1.65 | ... | ... | ... |
| 23 | 1.72 | 1.73 | 1.73 | 1.75 | 1.79 | 3.50 | 1.80 | 1.71 | 1.65 | ... | ... | ... |
| 24 | 1.72 | 1.74 | 1.72 | 1.75 | 1.78 | 2.61 | 1.80 | 1.71 | 1.65 | ... | ... | ... |
| 25 | 1.72 | 1.74 | 1.73 | 1.74 | 1.78 | 2.31 | 1.79 | 1.71 | 1.65 | ... | ... | ... |
| 26 | 1.73 | 1.74 | 1.73 | 1.74 | 1.78 | 2.22 | 1.82 | 1.70 | 1.66 | ... | ... | ... |
| 27 | 1.72 | 1.73 | 1.73 | 1.74 | 1.78 | 2.18 | 1.82 | 1.70 | 1.65 | ... | ... | ... |
| 28 | 1.73 | 1.74 | 1.73 | 1.74 | 1.78 | 2.10 | 1.80 | 1.70 | 1.65 | ... | ... | ... |
| 29 | 1.73 | 1.73 | 1.73 | 1.74 | 1.88 | 2.72 | 1.80 | 1.69 | 1.66 | ... | ... | ... |
| 30 | 1.72 | 1.73 | 1.74 | 1.74 | ... | 2.50 | 1.80 | 1.69 | 1.65 | ... | ... | ... |
| 31 | 1.72 | ... | 1.74 | 1.74 | ... | 2.50 | ... | 1.68 | ... | ... | ... | ... |
| **1904–5.** | | | | | | | | | | | | |
| 1 | ... | 1.40 | 1.45 | 1.45 | 1.70 | 2.20 | 2.00 | 1.90 | 1.10 | 0.70 | ... | ... |
| 2 | ... | 1.40 | 1.55 | 1.45 | 2.60 | 1.70 | 1.90 | 2.20 | 1.10 | .65 | ... | ... |
| 3 | ... | 1.41 | 1.55 | 1.45 | 3.70 | 1.45 | 1.86 | 2.60 | 1.15 | .65 | ... | ... |
| 4 | ... | 1.40 | 1.55 | 1.45 | 4.70 | 1.55 | 1.80 | 2.40 | 1.05 | .60 | ... | ... |
| 5 | ... | 1.40 | 1.55 | 1.45 | 4.20 | 1.60 | 1.70 | 2.30 | 1.05 | .58 | ... | ... |
| 6 | ... | 1.40 | 1.55 | 1.45 | 1.60 | 1.60 | 1.60 | 2.00 | 1.00 | .55 | ... | ... |
| 7 | ... | 1.39 | 1.55 | 1.45 | 2.70 | 1.45 | 1.55 | 1.50 | 1.00 | .53 | ... | ... |
| 8 | ... | 1.39 | 1.55 | 1.45 | 2.25 | 1.40 | 1.75 | 2.30 | 1.30 | .55 | ... | ... |
| 9 | ... | 1.39 | 1.55 | 2.10 | 2.10 | 1.40 | 1.55 | 2.10 | .99 | .56 | ... | ... |
| 10 | 1.70 | 1.39 | 1.55 | 1.90 | 2.00 | 1.40 | 1.50 | 1.90 | .98 | .56 | ... | ... |
| 11 | 1.72 | 1.39 | 1.55 | 1.80 | 1.90 | 1.40 | 2.00 | 1.70 | .98 | ... | ... | ... |
| 12 | 1.40 | 1.39 | 1.55 | 1.70 | 1.85 | 1.80 | 1.80 | 1.60 | .97 | ... | ... | ... |
| 13 | 1.40 | 1.39 | 1.50 | 1.65 | 1.80 | 2.90 | 1.60 | 1.50 | .96 | ... | ... | ... |
| 14 | 1.40 | 1.39 | 1.45 | 1.60 | 1.70 | 3.80 | 1.50 | 1.40 | .96 | ... | ... | ... |
| 15 | 1.40 | 1.39 | 1.40 | 1.60 | 1.70 | 2.95 | 1.45 | 1.30 | .96 | ... | ... | ... |
| 16 | 1.41 | 1.40 | 1.40 | 1.90 | 3.50 | 4.10 | 1.35 | 1.10 | .96 | ... | ... | ... |
| 17 | 1.40 | 1.41 | 1.40 | 1.90 | 2.60 | 7.00 | 1.30 | 1.10 | .96 | ... | ... | ... |
| 18 | 1.40 | 1.42 | 1.40 | 1.80 | 4.00 | 4.10 | 1.25 | 1.20 | .94 | ... | ... | ... |
| 19 | 1.40 | 1.43 | 1.40 | 1.85 | 2.70 | 3.50 | 1.15 | 1.35 | .92 | ... | ... | ... |
| 20 | 1.40 | 1.45 | 1.40 | 1.80 | 2.70 | 3.70 | 1.10 | 1.40 | .91 | ... | ... | ... |
| 21 | 1.40 | 1.45 | 1.40 | 1.90 | 2.00 | 2.90 | 1.05 | 1.40 | .91 | ... | ... | ... |
| 22 | 1.41 | 1.45 | 1.40 | 1.90 | 2.00 | 2.70 | 1.05 | 1.35 | .90 | ... | ... | ... |
| 23 | 1.40 | 1.45 | 1.45 | 1.90 | 1.90 | 2.75 | 1.05 | 1.30 | .90 | ... | ... | ... |
| 24 | 1.39 | 1.45 | 1.45 | 1.85 | 1.80 | 2.40 | 1.05 | 1.20 | .89 | ... | ... | 0.42 |
| 25 | 1.39 | 1.45 | 1.45 | 1.80 | 1.70 | 2.40 | 1.00 | 1.10 | .85 | ... | ... | .42 |
| 26 | 1.40 | 1.45 | 1.45 | 1.80 | 1.70 | 2.20 | 1.00 | 1.05 | .84 | ... | ... | .41 |
| 27 | 1.39 | 1.45 | 1.45 | 1.75 | 1.70 | 2.10 | 1.00 | 1.50 | .80 | ... | ... | .42 |
| 28 | 1.40 | 1.45 | 1.45 | 1.75 | 1.90 | 2.10 | 1.05 | 1.40 | .80 | ... | ... | .42 |
| 29 | 1.41 | 1.45 | 1.45 | 1.70 | ... | 2.20 | 1.05 | 1.30 | .78 | ... | ... | .41 |
| 30 | 1.41 | 1.45 | 1.45 | 1.70 | ... | 2.55 | 1.00 | 1.20 | .74 | ... | ... | .43 |
| 31 | 1.40 | ... | 1.50 | 1.70 | ... | 2.20 | ... | 1.10 | ... | ... | ... | ... |
| **1905–6.** | | | | | | | | | | | | |
| 1 | .43 | .54 | .9 | .75 | .1 | .8 | 3.35 | 1.6 | 1.1 | 0.5 | 0.5 | .2 |
| 2 | .43 | .54 | .8 | .7 | .1 | .8 | 2.9 | 1.5 | 1.1 | .5 | .5 | .2 |
| 3 | .43 | .54 | .8 | .7 | .9 | .8 | 2.55 | 1.4 | 1.1 | .5 | .5 | .2 |
| 4 | .42 | .54 | .75 | .7 | .9 | 1.0 | 2.5 | 1.4 | 1.1 | .5 | .5 | .2 |
| 5 | .43 | .56 | .74 | .7 | .15 | 1.2 | 2.75 | 1.5 | 1.1 | .3 | .5 | .2 |
| 6 | .42 | .58 | .7 | .7 | .2 | 1.0 | 3.0 | 1.45 | 1.05 | .5 | .5 | .2 |
| 7 | .43 | .6 | .68 | .7 | .3 | .96 | 3.0 | 1.4 | 1.0 | .5 | .25 | .2 |
| 8 | .44 | 1.1 | .67 | .7 | .3 | .7 | 3.05 | 1.3 | 1.0 | .5 | .3 | .2 |
| 9 | .43 | .62 | .65 | .65 | .25 | .6 | 2.6 | 1.3 | .9 | .5 | .25 | .2 |
| 10 | .43 | .61 | .6 | .65 | .2 | .65 | 2.6 | 1.3 | .85 | .5 | .25 | .2 |
| 11 | .44 | .62 | .6 | .6 | .65 | .65 | 2.45 | 1.25 | .8 | .5 | .3 | .2 |
| 12 | .44 | .6 | .65 | .6 | .5 | 5.0 | 2.2 | 1.55 | .7 | .5 | .25 | .2 |
| 13 | .44 | .6 | .65 | .6 | .4 | 6.55 | 2.15 | 1.4 | .7 | .5 | .2 | .2 |
| 14 | .44 | .59 | .68 | .7 | .4 | 3.55 | 2.15 | 1.2 | .65 | .5 | .2 | .2 |
| 15 | .44 | .58 | .7 | .7 | .8 | 2.3 | 2.15 | 1.15 | .6 | .5 | .2 | .5 |
| 16 | .44 | .58 | .7 | .7 | 2.65 | 2.85 | 2.06 | 1.1 | .6 | .5 | .2 | .35 |
| 17 | .44 | .59 | .7 | .65 | .85 | 4.8 | 2.05 | 1.06 | .85 | .5 | .2 | .2 |
| 18 | .44 | .59 | .71 | .65 | .95 | 3.65 | 1.95 | 1.0 | .8 | .5 | .8 | .2 |
| 19 | .45 | .6 | .71 | 1.0 | .85 | 2.95 | 1.95 | 1.0 | .7 | .5 | .7 | .2 |
| 20 | .46 | .6 | .7 | 2.6 | .75 | 2.5 | 1.85 | .96 | .6 | .5 | .6 | .2 |

*Daily gage height, in feet, of San Luis Rey River near Pala, Cal., for 1903-1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905-6. | | | | | | | | | | | | |
| 21 | 0.47 | 0.6 | 0.7 | 1.2 | 0.9 | 2.4 | 1.8 | 1.0 | 0.6 | 0.5 | 0.5 | 0.2 |
| 22 | .52 | .61 | .68 | .9 | .95 | 2.5 | 1.75 | .9 | .65 | .5 | .3 | .2 |
| 23 | .52 | .61 | .65 | .6 | 1.0 | 2.5 | 1.75 | .9 | .6 | .5 | .25 | .2 |
| 24 | .52 | .62 | .63 | .3 | .95 | 10.0 | 1.65 | .9 | .55 | .5 | .25 | .2 |
| 25 | .52 | .62 | .64 | .3 | .9 | 7.0 | 1.6 | .9 | .5 | .5 | .2 | .2 |
| 26 | .53 | .62 | .65 | .25 | .6 | 7.25 | 1.5 | 1.25 | .5 | .5 | .2 | .2 |
| 27 | .53 | .8 | .64 | .2 | .6 | 4.6 | 1.45 | 1.5 | .5 | .5 | .2 | .2 |
| 28 | .53 | 1.2 | .63 | .18 | .9 | 4.4 | 1.7 | 1.7 | .5 | .5 | .2 | .2 |
| 29 | .53 | 1.15 | .63 | .15 | ...... | 4.1 | 1.7 | 1.5 | .5 | .5 | .2 | .2 |
| 30 | .54 | 1.06 | .64 | .15 | ...... | 3.35 | 1.6 | 1.3 | .5 | .5 | .2 | .2 |
| 31 | .53 | ...... | .67 | .15 | ...... | 4.0 | ...... | 1.25 | ...... | .5 | .2 | ...... |
| 1906-7. | | | | | | | | | | | | |
| 1 | .2 | ...... | 5.6 | 6.7 | 7.9 | 6.55 | 7.3 | 6.35 | 5.9 | 5.54 | 5.3 | 5.34 |
| 2 | .2 | ...... | 5.6 | 6.55 | 7.4 | 6.5 | 7.9 | 6.3 | 5.85 | 5.52 | 5.32 | 5.34 |
| 3 | .2 | ...... | 5.55 | 6.5 | 7.4 | 6.5 | 7.85 | 6.3 | 5.85 | 5.5 | 5.32 | 5.35 |
| 4 | .2 | ...... | 5.55 | 6.5 | 7.35 | 6.8 | 7.7 | 6.25 | 5.85 | 5.5 | 5.3 | 5.35 |
| 5 | .2 | ...... | 5.55 | 6.6 | 7.3 | 9.7 | 7.7 | 6.3 | 5.85 | 5.5 | 5.29 | 5.34 |
| 6 | .2 | ...... | 5.55 | 7.9 | 6.9 | 8.0 | 7.65 | 6.4 | 5.85 | 5.51 | 5.28 | 5.35 |
| 7 | .2 | ...... | 5.5 | 7.1 | 6.8 | 8.0 | 7.55 | 6.35 | 5.85 | 5.5 | 5.28 | 5.35 |
| 8 | .2 | ...... | 5.5 | 6.7 | 6.75 | 7.7 | 7.4 | 6.3 | 5.8 | 5.5 | 5.3 | 5.34 |
| 9 | .2 | ...... | 5.5 | 6.9 | 6.6 | 7.6 | 7.3 | 6.25 | 5.8 | 5.5 | 5.3 | 5.35 |
| 10 | .2 | ...... | 5.45 | 8.85 | 6.5 | 7.55 | 7.15 | 6.2 | 5.8 | ...... | 5.32 | 5.34 |
| 11 | .2 | ...... | 5.4 | 7.2 | 6.5 | 7.5 | 7.05 | 6.2 | 5.8 | ...... | 5.33 | 5.35 |
| 12 | .2 | ...... | 7.8 | 6.8 | 6.45 | 7.5 | 6.95 | 6.2 | 5.8 | ...... | 5.32 | 5.35 |
| 13 | .2 | [a] 5.25 | 7.2 | 6.5 | 6.45 | 7.3 | 6.85 | 6.25 | 5.8 | ...... | 5.32 | 5.34 |
| 14 | .2 | 5.25 | 6.5 | 7.85 | 6.4 | 7.2 | 6.85 | 6.2 | 5.75 | 5.37 | 5.3 | 5.35 |
| 15 | .2 | 5.25 | 5.8 | 7.4 | 6.4 | 7.0 | 6.8 | 6.1 | 5.75 | 5.37 | 5.3 | 5.37 |
| 16 | ...... | 5.25 | 5.8 | 7.5 | 8.5 | 6.95 | 6.75 | 6.05 | 5.75 | 5.37 | 5.31 | 5.37 |
| 17 | ...... | 5.25 | 5.7 | 7.7 | 7.4 | 6.85 | 6.7 | 6.0 | 5.7 | 5.32 | 5.3 | 5.35 |
| 18 | ...... | 5.25 | 5.65 | 10.8 | 6.8 | 6.8 | 6.65 | 6.0 | 5.7 | 5.33 | 5.3 | 5.35 |
| 19 | ...... | 5.25 | 5.6 | 10.4 | 6.6 | 6.75 | 6.55 | 6.0 | 5.7 | 5.32 | 5.3 | 5.38 |
| 20 | ...... | 5.25 | 5.55 | 9.6 | 6.55 | 7.0 | 6.5 | 5.95 | 5.7 | 5.32 | 5.3 | 5.38 |
| 21 | ...... | 5.25 | 5.55 | 8.2 | 6.8 | 8.5 | 6.5 | 5.95 | 5.7 | 5.32 | 5.32 | 5.37 |
| 22 | ...... | 5.5 | 5.5 | 8.1 | 7.4 | 7.2 | 6.45 | 5.9 | 5.7 | 5.32 | 5.32 | 5.35 |
| 23 | ...... | 5.65 | 5.5 | 7.4 | 7.0 | 7.2 | 6.45 | 5.95 | 5.7 | 5.32 | 5.35 | 5.35 |
| 24 | ...... | 5.6 | 5.45 | 7.45 | 6.9 | 7.0 | 6.45 | 5.9 | 5.75 | 5.33 | 5.35 | 5.38 |
| 25 | ...... | 5.6 | 5.4 | 7.4 | 6.85 | 8.8 | 6.45 | 5.9 | 5.7 | 5.32 | 5.35 | 5.38 |
| 26 | ...... | 5.6 | 5.8 | 7.4 | 6.75 | 8.5 | 6.45 | 5.85 | 5.7 | 5.31 | 5.36 | 5.37 |
| 27 | ...... | 5.7 | 6.6 | 7.4 | 6.7 | 7.95 | 6.4 | 5.85 | 5.65 | 5.32 | 5.35 | 5.38 |
| 28 | ...... | 5.6 | 6.7 | 7.4 | 6.6 | 7.4 | 6.4 | 5.85 | 5.65 | 5.30 | 5.37 | 5.38 |
| 29 | ...... | 5.6 | 6.8 | 7.4 | ...... | 7.4 | 6.4 | 5.85 | 5.6 | 5.3 | 5.37 | 5.45 |
| 30 | ...... | 5.6 | 6.6 | 8.6 | ...... | 7.35 | 6.45 | 5.85 | 5.55 | 5.32 | 5.37 | 5.30 |
| 31 | ...... | ...... | 6.7 | 8.4 | ...... | 7.3 | ...... | 5.9 | ...... | 5.32 | 5.35 | ...... |
| 1907-8. | | | | | | | | | | | | |
| 1 | 5.35 | 5.85 | 5.5 | 5.7 | 6.3 | 6.45 | 5.95 | 5.6 | 5.6 | 5.4 | 5.35 | ...... |
| 2 | 5.35 | 5.9 | 5.5 | 5.65 | 6.3 | 6.35 | 5.9 | 5.65 | 5.65 | 5.4 | ...... | ...... |
| 3 | 5.4 | 5.85 | 5.5 | 5.65 | 7.75 | 6.2 | 5.9 | 5.8 | 5.65 | 5.4 | ...... | ...... |
| 4 | 5.5 | 5.85 | 5.5 | 5.65 | 7.55 | 6.6 | 5.9 | 5.8 | 5.6 | 5.45 | ...... | ...... |
| 5 | 5.45 | 5.85 | 5.5 | 5.6 | 6.8 | 6.75 | 5.85 | 5.8 | 5.6 | 5.45 | ...... | ...... |
| 6 | 5.5 | 5.8 | 5.5 | 5.65 | 6.7 | 6.6 | 5.85 | 5.75 | 5.6 | 5.45 | ...... | ...... |
| 7 | 5.45 | 5.85 | 5.7 | 5.6 | 6.55 | 6.45 | 5.85 | 5.75 | 5.6 | 5.45 | ...... | ...... |
| 8 | 5.5 | 5.85 | 5.75 | 5.6 | 6.4 | 6.4 | 5.85 | 5.75 | 5.55 | 5.45 | ...... | ...... |
| 9 | 5.5 | 5.85 | 5.75 | 5.6 | 7.1 | 6.4 | 5.8 | 5.7 | 5.6 | 5.4 | 5.85 | ...... |
| 10 | 5.45 | 5.8 | 5.7 | 5.6 | 7.85 | 6.4 | 5.8 | 5.7 | 5.55 | 5.4 | 5.75 | ...... |
| 11 | 5.5 | 5.8 | 5.75 | 5.6 | 7.3 | 6.35 | 5.75 | 5.7 | 5.55 | 5.4 | 5.55 | ...... |
| 12 | 5.5 | 5.8 | 5.7 | 5.6 | 7.1 | 6.25 | 5.7 | 5.75 | 5.55 | 5.4 | 5.4 | ...... |
| 13 | 5.5 | 5.8 | 5.7 | 5.65 | 7.0 | 6.15 | 5.7 | 5.75 | 5.55 | 5.4 | 5.35 | ...... |
| 14 | 5.5 | 5.8 | 5.7 | 5.8 | 6.9 | 6.1 | 5.65 | 5.75 | 5.55 | 5.4 | 5.35 | ...... |
| 15 | 5.55 | 5.8 | 5.7 | 6.0 | 6.85 | 6.05 | 5.65 | 5.75 | 5.55 | 5.35 | ...... | ...... |
| 16 | 5.7 | 5.8 | 5.7 | 5.8 | 6.6 | 6.0 | 5.65 | 5.8 | 5.6 | 5.35 | ...... | ...... |
| 17 | 5.85 | 5.8 | 5.7 | 5.7 | 6.5 | 5.95 | 5.65 | 5.8 | 5.55 | 5.55 | ...... | ...... |
| 18 | 5.8 | 5.95 | 5.65 | 5.7 | 6.5 | 5.9 | 5.65 | 5.75 | 5.55 | 5.35 | ...... | ...... |
| 19 | 5.8 | 5.9 | 5.65 | 5.65 | 6.5 | 5.9 | 5.6 | 5.7 | 5.55 | 5.35 | ...... | ...... |
| 20 | 5.8 | 5.85 | 5.6 | 5.6 | 6.5 | 5.9 | 5.6 | 5.65 | 5.55 | 5.35 | ...... | ...... |
| 21 | 5.8 | 5.85 | 5.6 | 5.6 | 6.5 | 5.85 | 5.9 | 5.65 | 5.5 | 5.35 | ...... | ...... |
| 22 | 5.9 | 5.8 | 5.6 | 5.6 | 6.5 | 5.9 | 6.25 | 5.6 | 5.5 | 5.35 | ...... | ...... |
| 23 | 6.4 | 5.8 | 5.6 | 5.75 | 6.5 | 5.85 | 6.3 | 5.6 | 5.5 | 5.35 | ...... | ...... |
| 24 | 6.5 | 5.8 | 5.6 | 6.6 | 6.35 | 5.85 | 6.15 | 5.6 | 5.5 | 5.35 | ...... | ...... |
| 25 | 6.2 | 5.75 | 5.6 | 7.1 | 6.3 | 5.85 | 5.95 | 5.6 | 5.45 | 5.35 | ...... | ...... |

[a] Gage heights after Nov. 13, 1906, are by the new gage, the datum of which is 4.66 feet below that of the old gage.

[illegible]

*ily gage height, in feet, of San Luis Rey River near Pala, Cal., for 1909–1911*—Contd.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | 1911. | | | | | | |
| | ...... | 6.23 | 6.90 | ...... | 5.96 | 5.81 | 16 | ...... | 7.10 | 7.05 | 6.23 | 5.85 | 5.68 |
| | ...... | 6.45 | 6.85 | ...... | 5.90 | 5.82 | 17 | ...... | ...... | ...... | 6.21 | 5.85 | 5.66 |
| | ...... | 6.65 | 7.20 | ...... | 5.88 | 5.79 | 18 | ...... | ...... | ...... | 6.18 | 5.83 | 5.65 |
| | ...... | 9.25 | 8.69 | ...... | 5.91 | 5.80 | 19 | ...... | ...... | 6.95 | 6.15 | 5.78 | 5.67 |
| | ...... | 7.65 | 7.65 | ...... | 5.88 | 5.80 | 20 | ...... | ...... | ...... | 6.15 | 5.71 | 5.68 |
| | ...... | 7.20 | 7.20 | ...... | 5.88 | 5.79 | 21 | ...... | ...... | ...... | 6.18 | 5.69 | 5.68 |
| | ...... | ...... | ...... | ...... | 5.88 | 5.73 | 22 | ...... | ...... | ...... | 6.19 | 5.72 | 5.70 |
| | ...... | ...... | ...... | ...... | 5.87 | 5.73 | 23 | ...... | 8.20 | ...... | 6.17 | 5.75 | 5.68 |
| | ...... | ...... | ...... | ...... | 5.86 | 5.70 | 24 | ...... | 7.55 | ...... | 6.13 | 5.75 | 5.70 |
| | 7.20 | ...... | ...... | ...... | 5.86 | 5.71 | 25 | ...... | ...... | ...... | 6.12 | 5.75 | 5.70 |
| | 7.70 | ...... | 8.80 | ...... | 5.85 | 5.72 | 26 | ...... | ...... | ...... | 6.80 | 5.76 | 5.70 |
| | 8.00 | ...... | ...... | 6.30 | 5.85 | 5.69 | 27 | ...... | 6.90 | ...... | 6.60 | 5.76 | 5.70 |
| | ...... | ...... | 7.20 | 6.30 | 5.85 | 5.70 | 28 | ...... | 7.28 | ...... | 6.50 | 5.74 | 5.72 |
| | ...... | 7.25 | ...... | 6.24 | 5.88 | 5.71 | 29 | ...... | ...... | ...... | 6.01 | 5.77 | 5.71 |
| | ...... | ...... | ...... | 6.21 | 5.87 | 5.68 | 30 | ...... | ...... | ...... | 5.99 | 5.78 | 5.70 |
| | | | | | | | 31 | ...... | ...... | ...... | ...... | 5.81 | ...... |

*Daily discharge, in second-feet, of San Luis Rey River near Pala, Cal., for 1910–11.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | | | | 1911. | | | | | | |
| | 3,770 | 100 | 79 | 82 | 20 | 63 | 1 | 5 | 29 | 146 | 80 | 18 | 10 |
| | 1,200 | 85 | 79 | 79 | 20 | 6 | 2 | 5 | 49 | 138 | 300 | 15 | 11 |
| | 485 | 78 | 60 | 79 | 18 | 6 | 3 | 5 | 72 | 200 | 150 | 14 | 9.6 |
| | 205 | 77 | 60 | 79 | 15 | 6 | 4 | 5 | 1,130 | 778 | 100 | 16 | 10 |
| | 200 | 75 | 60 | 79 | 12 | 5.6 | 5 | 5 | 308 | 262 | 90 | 14 | 10 |
| | 192 | 71 | 66 | 76 | 14 | 5.8 | 6 | 5 | 200 | 161 | 90 | 14 | 9.6 |
| | 195 | 67 | 62 | 69 | 12 | 7.2 | 7 | 5 | 140 | 140 | 170 | 14 | 7.2 |
| | 192 | 63 | 58 | 66 | 11 | 5.4 | 8 | 5 | 100 | 140 | 280 | 14 | 7.2 |
| | 192 | 60 | 54 | 64 | 10 | 5.2 | 9 | 5 | 75 | 160 | 160 | 13 | 6 |
| | 192 | 56 | 50 | 60 | 9 | 5.0 | 10 | 158 | 65 | 350 | 100 | 13 | 6.4 |
| | 225 | 52 | 45 | 59 | 9.3 | 4.8 | 11 | 274 | 60 | 805 | 65 | 12 | 6.8 |
| | 205 | 49 | 41 | 89 | 9.3 | 5.2 | 12 | 375 | 70 | 400 | 43 | 12 | 5.7 |
| | 192 | 45 | 37 | 72 | 9 | 5.2 | 13 | 150 | 80 | 161 | 43 | 12 | 6 |
| | 180 | 41 | 45 | 59 | 9 | 5.2 | 14 | 30 | 210 | 150 | 38 | 14 | 6.4 |
| | 200 | 47 | 42 | 55 | 9 | 5.2 | 15 | 45 | 200 | 140 | 35 | 14 | 5.4 |
| | 695 | 52 | 39 | 52 | 9 | 5.2 | 16 | 45 | 181 | 135 | 37 | 12 | 5.4 |
| | 580 | 58 | 44 | 49 | 8.7 | 5.2 | 17 | 30 | 170 | 130 | 35 | 12 | 4.8 |
| | 560 | 63 | 66 | 44 | 8.7 | 5.2 | 18 | 20 | 160 | 125 | 33 | 12 | 4.5 |
| | 485 | 69 | 52 | 39 | 8.4 | 5.2 | 19 | 10 | 160 | 120 | 30 | 9.2 | 5.1 |
| | 462 | 75 | 40 | 40 | 8.1 | 5.2 | 20 | 10 | 150 | 115 | 30 | 6.4 | 5.4 |
| | 422 | 76 | 35 | 32 | 8.1 | 5.4 | 21 | 10 | 140 | 110 | 33 | 5.7 | 5.4 |
| | 375 | 73 | 46 | 28 | 7.8 | 5.4 | 22 | 10 | 170 | 110 | 33 | 6.8 | 6 |
| | 320 | 69 | 51 | 25 | 7.8 | 5.4 | 23 | 10 | 510 | 105 | 32 | 8.0 | 5.4 |
| | 308 | 66 | 56 | 26 | 7.5 | 5.4 | 24 | 10 | 280 | 105 | 29 | 8.0 | 6 |
| | 272 | 76 | 61 | 22 | 7.5 | 5.4 | 25 | 10 | 170 | 100 | 28 | 8.0 | 6 |
| | 236 | 74 | 66 | 23 | 7.2 | 5.4 | 26 | 140 | 145 | 95 | 98 | 8.4 | 6 |
| | 205 | 72 | 90 | 22 | 7.2 | 5.4 | 27 | 60 | 146 | 90 | 74 | 8.4 | 6 |
| | 200 | 79 | 259 | 22 | 6.9 | 5.4 | 28 | 30 | 216 | 90 | 63 | 7.6 | 6.8 |
| | 155 | ...... | 191 | 22 | 6.9 | 5.4 | 29 | 30 | ...... | 85 | 21 | 8.8 | 6.4 |
| | 139 | ...... | 145 | 21 | 6.6 | 5.4 | 30 | 25 | ...... | 85 | 20 | 9.2 | 6 |
| | 119 | ...... | 101 | ...... | 6.6 | ...... | 31 | 25 | ...... | 80 | ...... | 10 | ..... |

NOTE.—Daily discharge determined from fairly well defined rating curves applicable as follows: Jan. 1 to Feb. 13, 1910; Feb. 14 to June 30, 1910; Jan. 1 to Feb. 4, 1911; Feb. 5 to Mar. 4, 1911; Mar. 5 to June 30, 1911; no record July to December in 1910 and 1911. Discharge interpolated for days on which gage was not read in January to June, 1910. Discharge estimated from hydrographs of neighboring streams for days on which gage was not read in January to June, 1911.

*Monthly discharge of San Luis Rey River near Pala, Cal., for 1903–1912.*

[Drainage area, 318 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1903-4.** | | | | | | | |
| October (23 days) | 1.5 | 1 | 1.1 | 0.0035 | 0.003 | [illegible] | |
| November | [illegible] | [illegible] | [illegible] | .0044 | .005 | [illegible] | |
| December | 1.5 | [illegible] | 1.2 | .0038 | .004 | [illegible] | |
| January | 1.5 | 1.5 | 1.5 | .0047 | .005 | [illegible] | |
| February | 2.5 | 1.5 | 2 | .0063 | .007 | [illegible] | |
| March | 348 | 1.5 | 41.6 | .131 | .15 | [illegible] | |
| April | [illegible] | 30 | 43.6 | .137 | .15 | [illegible] | |
| May | [illegible] | 12 | [illegible] | .051 | .06 | [illegible] | |
| June | [illegible] | [illegible] | [illegible] | .034 | .04 | [illegible] | |
| July | [illegible] | [illegible] | 3.8 | .012 | .01 | [illegible] | |
| August | 2 | 2 | 2 | .0063 | .007 | [illegible] | |
| September | 2 | 2 | 2 | .0063 | .007 | [illegible] | |
| The period | | | | | | [illegible] | |
| **1904-5.** | | | | | | | |
| October | [illegible] | 2 | 2.5 | .0079 | .009 | [illegible] | |
| November | [illegible] | 2 | 2.4 | .0076 | .008 | 143 | |
| December | 5.5 | 2 | 3.7 | .012 | .01 | [illegible] | |
| January | [illegible] | 3 | 19.1 | .060 | .07 | [illegible] | |
| February | 711 | 13 | 151 | .475 | .49 | [illegible] | |
| March | 4,265 | 2 | 336 | 1.06 | 1.22 | [illegible] | |
| April | [illegible] | 27 | 64.9 | .204 | .23 | [illegible] | |
| May | 282 | 27 | 88.1 | .277 | .32 | 5,417 | |
| June | 35 | 11 | 23 | .072 | .08 | [illegible] | |
| July | [illegible] | 3 | 4.1 | .013 | .01 | 252 | |
| August | 5.5 | 3 | 3.0 | .0094 | .01 | [illegible] | |
| September | 3 | 2.5 | 2.6 | .0082 | .009 | 155 | |
| The year | 4,265 | 2 | 58.4 | .184 | 2.47 | 42,000 | |
| **1905-6.** | | | | | | | |
| October | 3.8 | 2.8 | 3.2 | .010 | .01 | 197 | |
| November | 96 | 3.8 | 17.8 | .056 | .06 | 1,059 | |
| December | 47 | 10 | 18.3 | .058 | .07 | 1,125 | |
| January | 232 | 9 | 21.4 | .067 | .08 | 1,320 | |
| February | 241 | 10 | 28.6 | .090 | .09 | 1,590 | |
| March | 13,000 | 17 | 1,120 | 3.52 | 4.06 | 68,900 | |
| April | 620 | 114 | 301 | .947 | 1.06 | 17,900 | |
| May | 260 | 100 | 158 | .497 | .57 | 9,720 | |
| June | 128 | 39 | 65.6 | .206 | .23 | 3,900 | |
| July | 39 | 19 | 19 | .060 | .07 | 1,170 | |
| August | 43 | 3 | 10.3 | .032 | .04 | 633 | |
| September | 19 | 3 | 3.7 | .012 | .01 | 220 | |
| The year | 13,000 | 2.8 | 147 | .463 | 6.35 | 108,000 | |
| **1906-7.** | | | | | | | |
| October | 3 | 3 | 3 | .0094 | .01 | 184 | |
| November | 28 | 3 | 8.3 | .026 | .03 | 494 | |
| December | 550 | 9 | 79.3 | .249 | .29 | 4,880 | |
| January | 2,800 | 151 | 541 | 1.70 | 1.96 | 33,300 | [illegible] |
| February | 910 | 79 | 154 | .484 | .5 | 8,550 | C. |
| March | 2,100 | 85 | 326 | 1.03 | 1.19 | 20,000 | C. |
| April | 410 | 98 | 167 | .525 | .59 | 9,940 | C. |
| May | 98 | 33 | 62.5 | .197 | .23 | 3,840 | C. |
| June | 40 | 8 | 22.8 | .072 | .08 | 1,360 | B. |
| July | 7.6 | 1 | 3.27 | .010 | .01 | 201 | B. |
| August | 2.4 | .6 | 1.42 | .0045 | .01 | 87 | B. |
| September | 4.5 | 1.8 | 2.22 | .007 | .01 | 132 | B. |
| The year | 2,800 | .6 | 114 | .359 | 4.91 | 83,000 | |
| **1907-8.** | | | | | | | |
| October | 109 | 2 | 28.1 | .088 | .10 | 1,730 | B. |
| November | 47 | 8 | 27.8 | .087 | .10 | 1,650 | B. |
| December | 22 | 6 | 13.3 | .042 | .05 | 818 | B. |
| January | 480 | 10 | 62.6 | .197 | .23 | 3,850 | C. |
| February | 544 | 60 | 175 | .550 | .59 | 10,100 | C. |
| March | 169 | 21 | 61.1 | .192 | .22 | 3,760 | C. |
| April | 71 | 10 | 21.3 | .067 | .07 | 1,270 | C. |
| May | 18 | 10 | 13.2 | .041 | .05 | 812 | C. |
| June | 12 | 4 | 7.4 | .023 | .03 | 440 | C. |

*Monthly discharge of San Luis Rey River near Pala, Cal., for 1903-1911*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1907-8.** | | | | | | | |
| July | 5 | 2 | 3.0 | 0.0094 | 0.01 | 184 | C. |
| August | 21 | 2 | 3.4 | .011 | .01 | 209 | C. |
| September | 2 | 2 | 2.0 | .0063 | .01 | 119 | C. |
| The year | 544 | 2 | 34.8 | .110 | 1.47 | 24,900 | |
| **1908-9.** | | | | | | | |
| October | 5 | 2 | 3.5 | .011 | .01 | 215 | C. |
| November | 7 | 5 | 6.1 | .019 | .02 | 363 | C. |
| December | 12 | 5 | 8.6 | .027 | .03 | 529 | C. |
| January | 3,240 | 7 | 198 | .622 | .72 | 12,200 | |
| February | 930 | 110 | 332 | 1.04 | 1.08 | 18,400 | |
| March | 425 | 67 | 137 | .431 | .50 | 8,420 | |
| April | 182 | 45 | 91.0 | .286 | .32 | 5,410 | |
| May | 44 | 8 | 27.6 | .087 | .10 | 1,700 | |
| June | 8 | 5 | 6.23 | .020 | .02 | 371 | |
| July | 6 | 5 | 5.35 | .017 | .02 | 329 | |
| August | 6 | 5 | 5.13 | .016 | .02 | 315 | |
| September | 5 | 5 | 5.00 | .016 | .02 | 298 | |
| The year | 3,240 | 2 | 68.8 | .216 | 2.86 | 48,000 | |
| **1909-10.** | | | | | | | |
| October | 5 | 5 | 5.00 | .016 | .02 | 307 | |
| November | 23 | 5 | 12.4 | .039 | .04 | 738 | |
| December | 350 | 13 | 107 | .336 | .39 | 6,580 | |
| January | 3,770 | 119 | 431 | 1.35 | 1.56 | 26,500 | C. |
| February | 100 | 41 | 66.7 | .210 | .22 | 3,700 | B. |
| March | 259 | 35 | 70.6 | .222 | .26 | 4,340 | B. |
| April | 89 | 21 | 51.1 | .161 | .18 | 3,040 | B. |
| May | 20 | 6.6 | 9.99 | .034 | .04 | 614 | B. |
| June | 7.2 | 4.8 | 5.47 | .017 | .02 | 325 | B. |
| The period | | | | | | 46,100 | |
| **1911.** | | | | | | | |
| January | 375 | 5 | 50.1 | .158 | .18 | 3,080 | D. |
| February | 1,130 | 29 | 192 | .604 | .63 | 10,700 | C. |
| March | 805 | 80 | 187 | .588 | .68 | 11,500 | C. |
| April | 300 | 20 | 78.0 | .245 | .27 | 4,640 | C. |
| May | 18 | 5.7 | 11.3 | .036 | .04 | 695 | C. |
| June | 11 | 4.5 | 6.75 | .021 | .02 | 402 | C. |
| The period | | | | | | 31,000 | |

NOTE.—Discharge determined by the indirect method for shifting channels and from rating curves covering short periods of time.

## SAN LUIS REY RIVER AT BONSALL, CAL.

This station, which is located at the concrete highway bridge at Bonsall, in the SW. ¼ SW. ¼ sec. 20, T. 10 S., R. 3 W., just below Moosa Canyon, about 14 miles below the gaging station near Pala, and 14 miles above the mouth of the river, was established April 16, 1912.

In addition to the water diverted from the San Luis Rey above the Pala gaging station, the Morena ditch and the Pala Indian Reservation canal divert water for irrigation in the vicinity of Pala.

The gage is a vertical staff on the right bank, about 150 feet below the bridge. The channel is composed of sand and is somewhat shifting. Discharge measurements are made from the bridge.

The results are considered good.

The station is maintained in cooperation with the Volcan Land & Water Co. through W. S. Post, engineer.

*Discharge measurements of San Luis Rey River at Bonsall, Cal., in 1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1912. | | *Feet.* | *Sec.-ft.* | | | *Feet.* | *Sec.-ft.* |
| Apr. 16 | F. C. Ebert | 1.88 | 219 | May 14 | E. W. Case | 1.60 | 44 |
| 19 | H. L. Davis | 1.93 | 174 | 22 | F. C. Ebert | 1.53 | 16 |
| May 3 | F. C. Ebert | 1.61 | 48 | June 15 | E. W. Case | 1.29 | .3 |

*Daily gage height, in feet, of San Luis Rey River at Bonsall, Cal., for 1912.*

| Day. | Apr. | May. | June. | Day. | Apr. | May. | June. | Day. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 1.65 | 1.32 | 11 | | 1.78 | 1.3 | 21 | 1.82 | 1.5 | 1.25 |
| 2 | | 1.52 | 1.32 | 12 | | 1.65 | 1.3 | 22 | 1.78 | 1.5 | 1.25 |
| 3 | | 1.55 | 1.32 | 13 | | 1.6 | 1.3 | 23 | 1.68 | 1.48 | 1.25 |
| 4 | | 1.5 | 1.3 | 14 | | 1.6 | 1.3 | 24 | 1.68 | 1.4 | |
| 5 | | 1.5 | 1.3 | 15 | | 1.65 | 1.3 | 25 | 1.68 | 1.4 | |
| 6 | | 1.5 | 1.3 | 16 | 1.85 | 1.62 | 1.3 | 26 | 1.62 | 1.4 | |
| 7 | | 1.5 | 1.28 | 17 | 1.92 | 1.5 | 1.3 | 27 | 1.7 | 1.4 | |
| 8 | | 1.7 | 1.25 | 18 | 2.0 | 1.5 | 1.25 | 28 | 1.58 | 1.35 | |
| 9 | | 1.92 | 1.3 | 19 | 1.88 | 1.5 | 1.25 | 29 | 1.55 | 1.35 | |
| 10 | | 1.9 | 1.3 | 20 | 1.8 | 1.5 | 1.25 | 30 | 1.68 | 1.32 | |
| | | | | | | | | 31 | | 1.3 | |

NOTE.—Water reported standing in pools after June 18, 1912.

*Daily discharge, in second-feet, of San Luis Rey River at Bonsall, Cal., for 1912.*

| Day. | Apr. | May. | June. | Day. | Apr. | May. | June. | Day. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 58 | 1.8 | 11 | | 109 | 1.0 | 21 | 126 | 14 | 0.0 |
| 2 | | 19 | 1.8 | 12 | | 58 | 1.0 | 22 | 109 | 14 | .0 |
| 3 | | 27 | 1.8 | 13 | | 40 | 1.0 | 23 | 70 | 12 | .0 |
| 4 | | 14 | 1.0 | 14 | | 40 | 1.0 | 24 | 70 | 5.0 | .0 |
| 5 | | 14 | 1.0 | 15 | | 58 | 1.0 | 25 | 70 | 5.0 | .0 |
| 6 | | 14 | 1.0 | 16 | 202 | 47 | 1.0 | 26 | 47 | 5.0 | .0 |
| 7 | | 14 | .6 | 17 | 218 | 14 | 1.0 | 27 | 77 | 5.0 | .0 |
| 8 | | 77 | .0 | 18 | 228 | 14 | .0 | 28 | 35 | 3.0 | .0 |
| 9 | | 170 | 1.0 | 19 | 151 | 14 | .0 | 29 | 27 | 3.0 | .0 |
| 10 | | 160 | 1.0 | 20 | 117 | 14 | .0 | 30 | 70 | 1.8 | .0 |
| | | | | | | | | 31 | | 1.0 | |

NOTE.—Daily discharge determined from a fairly well-defined rating curve. Indirect method for shifting channels used Apr. 16–18, 1912.

*Monthly discharge of San Luis Rey River at Bonsall, Cal., for 1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| April 16–30 | 228 | 27 | 108 | 3,210 | B. |
| May | 170 | 1.0 | 33.7 | 2,070 | B. |
| June | 1.8 | .0 | .60 | 35.7 | C. |

### SAN LUIS REY RIVER NEAR OCEANSIDE, CAL.

This station, which is located opposite the Oceanside pumping plant, in the SE. ¼ NE. ¼ sec. 22, T. 11 S., R. 5 W., and about 1½ miles above the mouth of the river, was established April 17, 1912.

The gage is a vertical staff on the right bank just above the ford. The channel is composed of sand and shifts somewhat.

Discharge measurements are made from a concrete highway bridge about three-fourths of a mile below the gage or by wading. The results are considered good.

In addition to diversions mentioned in the description of the San Luis Rey at Bonsall, several small canals divert water for irrigation in Mission Valley. Water is also pumped from wells at various points in the valley.

This station is maintained in cooperation with the Volcan Land & Water Co. through W. S. Post, engineer.

*Discharge measurements of San Luis Rey River near Oceanside, Cal., in 1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1912. | | *Feet.* | *Sec.-feet.* |
| Apr. 17 | F. C. Ebert | 2.55 | 215 |
| May 3 | ....do | 2.24 | 33 |
| 13 | E. W. Case | 2.28 | 46 |
| 21 | F. C. Ebert | 2.06 | 9.1 |

*Daily gage height, in feet, of San Luis Rey River near Oceanside, Cal., for 1912.*

| Day. | Apr. | May. | Day. | Apr. | May. | Day. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|
| 1 | | 2.28 | 11 | | 2.31 | 21 | 2.54 | 2.1 |
| 2 | | 2.25 | 12 | | 2.26 | 22 | 2.44 | 2.04 |
| 3 | | 2.22 | 13 | | 2.22 | 23 | 2.41 | 2.0 |
| 4 | | 2.19 | 14 | | 2.22 | 24 | 2.38 | 1.98 |
| 5 | | 2.15 | 15 | | 2.19 | 25 | 2.36 | 1.9 |
| 6 | | 2.15 | 16 | | 2.16 | 26 | 2.32 | 1.9 |
| 7 | | 2.14 | 17 | 2.52 | 2.12 | 27 | 2.34 | 1.9 |
| 8 | | 2.26 | 18 | 2.54 | 2.1 | 28 | 2.31 | 1.9 |
| 9 | | 2.48 | 19 | 2.55 | 2.14 | 29 | 2.31 | |
| 10 | | 2.44 | 20 | 2.54 | 2.11 | 30 | 2.3 | |
| | | | | | | 31 | | |

NOTE.—River dry May 31 to June 30, 1912.

*Daily discharge, in second-feet, of San Luis Rey River near Oceanside, Cal., for 1912.*

| Day. | Apr. | May. | Day. | Apr. | May. | Day. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|
| 1 | | 47 | 11 | | 58 | 21 | 208 | 12 |
| 2 | | 39 | 12 | | 42 | 22 | 128 | 8.4 |
| 3 | | 31 | 13 | | 31 | 23 | 107 | 6 |
| 4 | | 24 | 14 | | 31 | 24 | 91 | 5.2 |
| 5 | | 18 | 15 | | 24 | 25 | 81 | 2 |
| 6 | | 18 | 16 | | 20 | 26 | 62 | 2 |
| 7 | | 17 | 17 | 189 | 15 | 27 | 72 | 2 |
| 8 | | 42 | 18 | 208 | 12 | 28 | 58 | 2 |
| 9 | | 156 | 19 | 218 | 17 | 29 | 58 | 2 |
| 10 | | 128 | 20 | 208 | 13 | 30 | 53 | 1 |
| | | | | | | 31 | | .0 |

NOTE.—Daily discharge determined from a rating curve well defined above 8 second-feet. Discharge interpolated May 29-30, 1912.

... per ... 1911.

| Date. | Miscellaneous measurements. | | Run-off ... acre-feet). | |
| --- | --- | --- | --- | --- |
| | ... | Mean. | | |
| | | 1 | .40 | |
| | | | .40 | |

...

... owing miscellaneous measurements have been made in the ...

... measurements in ... for ...

| Date. | Locality. | Gage height. | Discharge. |
| --- | --- | --- | --- |
| | ... of ... man, ... Dominio ... canal. | | |
| | ... Dominio canal. ... reservoir. | | |
| | ... canal. | | |
| | ... lake ... NW. | | |
| | ... lake ... | | |

## SANTA MARGARITA RIVER BASIN.

### TEMECULA CREEK NEAR TEMECULA, CAL.

This station, which was located about 1½ miles south of the town of Temecula at the bridge on the road from Temecula to Pala and Falbrook, was established December 30, 1905.

The channel is straight for 500 feet above and 100 feet below. The bed is shifting sand and the channel is continually changing, being usually in two channels at low water. Neither bank is liable to overflow at any stage.

During low water, discharge measurements were made by wading below the bridge. High-water measurements were made from the downstream side of the bridge.

The gage was a timber fastened to the downstream pier nearest to the right bank.

*Discharge measurements of Temecula River near Temecula, Cal., in 1905–6.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1905. | | *Feet.* | *Sec.-ft.* | 1906. | | *Feet.* | *Sec.-ft.* |
| Nov. 14 | W. B. Clapp | 3.10 | 5.8 | Apr. 13 | W. V. Hardy | 5.84 | 12.1 |
| Dec. 30 | W. V. Hardy | 2.98 | 4.6 | 27 | .....do | 5.82 | 5.6 |
| | | | | May 15 | .....do | 5.88 | 6.4 |
| 1906. | | | | June 26 | C. H. Lee | 5.80 | 2.6 |
| Jan. 12 | W. V. Hardy | 2.90 | 4.4 | Aug. 5 | R. S. Hawley | .......... | 0.8 |
| 29 | .....do | 2.94 | 4.9 | Oct. 10 | W. F. Martin | .......... | 3.9 |
| Feb. 10 | .....do | 2.99 | 4.4 | Nov. 12 | W. V. Hardy | 5.80 | 7.6 |
| 24 | .....do | 3.20 | 3.3 | Dec. 4 | .....do | 6.00 | 7.2 |
| Mar. 5 | .....do | 3.49 | 6.0 | 29 | .....do | 6.10 | 14.9 |
| 6 | .....do | 3.42 | 5.4 | | | | |
| 18 | .....do | 3.82 | 16.8 | 1908. | | | |
| 19 | .....do | 3.69 | 12.0 | July 12 | .................... | 6.12 | 2.6 |

*Daily gage height, in feet, of Temecula River near Temecula, Cal., for 1906.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Dec. |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.0 | 2.9 | 3.4 | 5.9 | 5.75 | 5.9 | 5.8 | ........ |
| 2 | 3.0 | 2.8 | 3.5 | 5.8 | 5.7 | 5.8 | 5.8 | ........ |
| 3 | 3.0 | 2.8 | 3.5 | 5.8 | 5.7 | 5.8 | 5.9 | 6.0 |
| 4 | 3.0 | 2.8 | 3.45 | 5.8 | 5.7 | 5.8 | 5.9 | 6.0 |
| 5 | 3.0 | 2.8 | 3.45 | 6.7 | 5.75 | 5.8 | 5.9 | 6.0 |
| 6 | 3.0 | 2.8 | 3.5 | 6.3 | 5.75 | 5.8 | 5.9 | 6.0 |
| 7 | 3.0 | 2.8 | 3.5 | 5.8 | 5.75 | 5.8 | 5.9 | 5.9 |
| 8 | 3.0 | 2.9 | 3.55 | 5.8 | 5.75 | 5.8 | 5.9 | 5.9 |
| 9 | 2.9 | 2.95 | 3.5 | 5.8 | 5.75 | 5.8 | 5.8 | 5.9 |
| 10 | 2.9 | 2.95 | 3.6 | 5.8 | 5.75 | 5.8 | 5.9 | 5.9 |
| 11 | 2.9 | 3.0 | 3.9 | 5.8 | 5.75 | 5.75 | 5.9 | 5.9 |
| 12 | 2.9 | 3.0 | 4.9 | 5.8 | 5.7 | 5.7 | 5.8 | 6.0 |
| 13 | 2.9 | 3.0 | 5.0 | 5.8 | 5.7 | 5.75 | 5.9 | 6.0 |
| 14 | 2.9 | 3.0 | 4.9 | 5.8 | 5.7 | 5.8 | 5.8 | 5.9 |
| 15 | 2.9 | 3.0 | 4.9 | 5.8 | 5.7 | 5.75 | 5.9 | 5.9 |
| 16 | 2.9 | 3.2 | 3.7 | 5.8 | 5.8 | 5.75 | 5.9 | 5.95 |
| 17 | 2.9 | 3.2 | 3.7 | 5.8 | 5.85 | 5.75 | 5.9 | 6.0 |
| 18 | 2.9 | 3.25 | 3.65 | 5.8 | 5.95 | 5.75 | ........ | 6.0 |
| 19 | 3.1 | 3.25 | 3.65 | 5.75 | 5.85 | 5.75 | ........ | 5.9 |
| 20 | 3.0 | 3.25 | 3.5 | 5.75 | 5.85 | 5.75 | ........ | 5.9 |
| 21 | 3.0 | 3.25 | 3.3 | 5.75 | 5.85 | 5.75 | ........ | 5.9 |
| 22 | 3.0 | 3.25 | 3.4 | 5.75 | 5.9 | 5.75 | ........ | 5.9 |
| 23 | 3.0 | 3.25 | 9.6 | 5.75 | 5.9 | 5.75 | ........ | 5.95 |
| 24 | 3.0 | 3.25 | 9.65 | 5.75 | 5.85 | 5.75 | ........ | 5.9 |
| 25 | 3.0 | 3.25 | 8.0 | 5.75 | 5.85 | 5.75 | ........ | ........ |
| 26 | 3.0 | 3.3 | 7.6 | 5.75 | 5.9 | 5.8 | ........ | 6.2 |
| 27 | 2.9 | 3.4 | 6.0 | 5.75 | 5.85 | 5.8 | ........ | 6.0 |
| 28 | 2.9 | 3.4 | 5.5 | 5.75 | 5.8 | 5.8 | ........ | 6.2 |
| 29 | 2.9 | ........ | 5.5 | 5.75 | 5.8 | 5.8 | ........ | 6.05 |
| 30 | 2.9 | ........ | 5.9 | 5.75 | 5.8 | 5.8 | ........ | 6.1 |
| 31 | 2.9 | ........ | 5.9 | ........ | 5.8 | ........ | ........ | 6.25 |

NOTE.—No gage height record was kept from July 18 to Dec. 2, 1906. Discharges have not been computed on account of the small number of measurements at times of excessive changes in channel.

The following discharge measurement of Temecula River was made at Pauba dam site, 12 miles above Temecula, Cal., November 14, 1905: Discharge, 2.5 second-feet.

## SANTA ANA RIVER BASIN.

### SANTA ANA RIVER AND PACIFIC LIGHT & POWER CO.'S CANAL NEAR MENTONE, CAL.

This station, which is located at the road crossing opposite Warm Spring Canyon, about three-fourths of a mile below the head works of the Pacific Light & Power Co.'s canal,[1] 5 miles northeast of Mentone, in the SW. ¼ SW. ¼ sec. 34, T. 1 N., R. 2 W., S. B. M., was established in June, 1896, and is about 2 miles below the mouth of Alder Creek.

Since 1905 practically all the low-water flow is diverted above the station into the power canal. After leaving the power house this water is carried across the river to an irrigation canal. The flow in the canal is measured by a 10-foot rectangular weir at the tail race of the Pacific Light & Power Co.'s plant and is added to that at the

[1] Canal formerly known as Santa Ana canal and also as Mentone Power Co.'s canal.

station on the river in order to obtain the total for the stream. The acquired water rights exceed the low-water flow.

The original staff gage was fastened to the left bank about 100 feet above the ford. On November 9, 1898, the station was moved to a point 800 feet below the mouth of Warm Spring Canyon, where the discharge of the river was obtained by adding together the flow in the several irrigating ditches. After January 1, 1901, the old gage was again used. The gage datum was lowered June 30, 1903, and the new datum was maintained until January 1, 1910, when a severe flood carried away both gage and the car and cable from which discharge measurements were made and destroyed existing bench marks. The channel was completely changed. A new inclined staff gage was installed January 23, 1910, on the left bank, 50 feet above the former location, and set at a new datum. On February 25, 1910, however, it was found desirable to install a gage in the west channel, which carried most of the water. All gage heights for 1910 prior to February 25 have been corrected to the datum of the west gage from a relation curve obtained from synchronous readings of the two gages.

The Greenspot pipe line originally took water from the river below the station, but since 1903 it has also been taking water from the power canal, the amount of which is not included in the total discharge of the river. In September, 1911, the pipe line began to divert water from the forebay of the power canal, and since that time a record has been kept of the amount diverted.

Discharge measurements are made by wading at low and medium stages. As it is very difficult to reach the station at high stages the cable has not been replaced.

Conditions for obtaining accurate discharge data are fair. The stream has a rocky bed and is subject to slight change. At high stages the current is swift and it is difficult to get accurate gagings. The records are fairly satisfactory.

*Discharge measurements of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., in 1896–1912.*

| Date. | Hydrographer. | Gage height of river. | Discharge. | | |
|---|---|---|---|---|---|
| | | | River. | Canal. | Total for river. |
| 1896. | | *Feet.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Apr. 27 | J. A. Vogleson | ........ | ........ | ........ | 51 |
| June 20 | J. B. Lippincott | 1.28 | 61.8 | 18.3 | 80.1 |
| July 25 | J. H. Quinton | 1.29 | ........ | ........ | 75 |
| 28 | .....do | 1.29 | 59.7 | 15 | 74.7 |
| Nov. 21 | J. B. Lippincott | .98 | 31.7 | 3.5 | 35.2 |
| 1897. | | | | | |
| Jan. 27 | J. B. Lippincott | ........ | 43.6 | 4.0 | 47.6 |
| Mar. 4 | .....do | 1.45 | 101 | 5 | 106 |
| May 3 | .....do | 1.50 | 96 | ........ | 96 |
| 4 | .....do | 1.50 | 98 | ........ | 98 |
| June 15 | .....do | 1.15 | 64 | 19 | 83 |
| July 5 | A. Q. Campbell | 1.20 | 72 | 18 | 90 |

*Miscellaneous measurements of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., in 1896–191[illegible]*—Continued.

| Date. | Hydrographer. | Gage height of river. | Discharge. | | |
|---|---|---|---|---|---|
| | | | River. | Canal. | Total in river. |
| | | Feet. | Sec.-ft. | Sec.-ft. | Sec.-ft. |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Discharge measurements of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., in 1896–1912*—Continued.

| Date. | Hydrographer. | Gage height of river. | Discharge. | | |
|---|---|---|---|---|---|
| | | | River. | Canal. | Total for river. |
| 1905. | | *Feet.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Feb. 13 | Clapp and La Rue | 1.15 | 10 | 40 | 50 |
| 21 | E. C. La Rue | 1.70 | 17 | 74 | 91 |
| 22 | .....do | 1.65 | 10 | 71 | 81 |
| 23 | .....do | 1.65 | 11 | 63 | 74 |
| Mar. 14[a] | .....do | 2.60 | 188 | ......... | 188 |
| 14[b] | .....do | 2.50 | 138 | 50 | 188 |
| 15[a] | .....do | 2.30 | 132 | 57 | 189 |
| 15[b] | .....do | 2.10 | 113 | 57 | 170 |
| 30 | R. S. Hawley | 1.90 | 81 | 46 | 127 |
| Apr. 14 | .....do | 1.95 | 86 | 1 | 87 |
| May 17 | .....do | 2.25 | 111 | 37 | 148 |
| June 7 | .....do | 2.20 | 79 | ......... | 79 |
| 26 | .....do | 1.43 | 4 | 66 | 70 |
| July 6 | .....do | 1.40 | 3 | 61 | 64 |
| 1906. | | | | | |
| Jan. 20 | C. H. Lee | 2.17 | 87 | 37 | 124 |
| Feb. 11 | .....do | 1.51 | 11 | 42 | 53 |
| 11 | .....do | 1.57 | 15.8 | 42 | 58 |
| 11 | .....do | 1.54 | 12.8 | 42 | 55 |
| 12 | .....do | 1.45 | 6.7 | 52 | 59 |
| Mar. 14 | .....do | 3.50 | 351 | 27 | 378 |
| 16 | .....do | 5.40 | 1,410 | 49 | 1,460 |
| 16 | .....do | 5.80 | 1,870 | 49 | 1,920 |
| 17 | .....do | 4.15 | 677 | ......... | 677 |
| 17 | .....do | 3.85 | 597 | ......... | 597 |
| 18 | .....do | 3.70 | 405 | 11 | 416 |
| 23 | M. P. Beeson | 3.05 | 156 | 55 | 211 |
| 25 | .....do | 4.90 | 913 | 35 | 948 |
| 26 | .....do | 6.35 | 2,250 | 34 | 2,280 |
| 26 | .....do | 5.90 | 1,780 | 34 | 1,810 |
| 27 | .....do | 5.25 | 1,200 | 25 | 1,220 |
| Apr. 10 | C. H. Lee | 3.00 | 130 | 68 | 198 |
| 21 | M. P. Beeson | 3.50 | 214 | 72 | 286 |
| May 12 | .....do | 3.60 | 148 | 71 | 219 |
| 12 | .....do | 3.60 | 160 | 71 | 231 |
| June 2 | .....do | 3.50 | 149 | 66 | 215 |
| 28 | .....do | 3.00 | 70 | 71 | 141 |
| Aug. 4 | R. S. Hawley | 2.55 | 13.1 | 72 | 85 |
| Oct. 11 | W. F. Martin | 2.31 | 2.9 | 61 | 64 |
| Dec. 28 | .....do | 3.85 | 276 | 74 | 350 |
| 1907. | | | | | |
| Jan. 10 | W. F. Martin | 3.82 | 284 | 76 | 360 |
| Feb. 27 | .....do | 3.95 | 379 | 76 | 455 |
| Mar. 12 | .....do | 4.1 | 501 | 76 | 577 |
| 26 | .....do | 4.65 | 872 | 72 | 944 |
| Apr. 29 | W. B. Clapp | 3.35 | 184 | 73 | 257 |
| June 12 | W. F. Martin | 3.00 | 110 | 70 | 180 |
| 27 | W. B. Clapp | 2.75 | 79 | 70 | 149 |
| July 30 | W. F. Martin | 2.52 | 59 | 69 | 128 |
| Aug. 22 | .....do | 2.15 | 16 | 69 | 85 |
| Sept. 18 | W. B. Clapp | 1.85 | 2.6 | 66 | 69 |
| 1908. | | | | | |
| Jan. 29 | W. F. Martin | 3.0 | 126 | ......... | 126 |
| Feb. 20 | .....do | 2.64 | 77 | 78 | 155 |
| May 15 | W. B. Clapp | 1.85 | 4 | 68 | 72 |
| 1909. | | | | | |
| Mar. 5 | W. B. Clapp | 2.75 | 49 | 76 | 125 |
| 23 | W. F. Martin | 3.30 | 124 | 76 | 200 |
| May 12 | W. B. Clapp | 3.05 | 83 | 73 | 156 |
| June 18 | .....do | 2.38 | 9 | 76 | 85 |
| July 9 | .....do | 2.20 | 2.8 | 64 | 66.8 |
| Dec. 31 | .....do | 4.75 | 477 | 70 | 547 |
| 1910. | | | | | |
| Feb. 5 | R. E. Haines | 1.55 | 31 | 73 | 104 |
| 24 | J. E. Stewart | 1.40 | 19 | 66 | 85 |
| Apr. 13 | .....do | 1.95 | 67 | 78 | 145 |
| 28 | W. B. Clapp | 1.30 | 11 | 78 | 89 |
| June 7 | .....do | 1.21 | 6.9 | 72 | 79 |
| July 20 | J. E. Stewart | 1.92 | 67 | 0 | 67 |
| Sept. 14 | W. B. Clapp | 1.28 | 6.4 | 58 | 64 |

[a] a. m. [b] p. m.

*Discharge measurements of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., in 1896–1912*—Continued.

| Date. | Hydrographer. | Gage height of river. | Discharge. | | |
|---|---|---|---|---|---|
| | | | River. | Canal. | Total for river. |
| 1911. | | *Feet.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Feb. 17 | W. V. Hardy | 2.28 | 104 | 72 | 17[illegible] |
| 21 | ....do | 2.01 | 76 | 72 | 14[illegible] |
| Apr. 8 | ....do | 3.68 | 162 | 71 | 23[illegible] |
| 22 | ....do | 3.43 | 96 | 71 | 16[illegible] |
| May 25 | ....do | 3.15 | 49 | 74 | 12[illegible] |
| June 26 | H. D. McGlashan | 2.94 | 21 | 77 | 9[illegible] |
| Aug. 29 | F. C. Ebert | 2.53 | 1.7 | 66 | 6[illegible] |
| 1912. | | | | | |
| Jan. 11 | F. C. Ebert | 2.50 | 1.4 | ........ | ........ |
| Mar. 20 | ....do | 2.71 | 9.3 | ........ | ........ |
| May 27 | ....do | 2.49 | 2.2 | ........ | ........ |

NOTE.—Gage heights in the above table refer to the discharge of the river alone and not to the combined discharge.

*Daily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1896–1903.*

| Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1896. | | | | 1896. | | | | 1896. | | | |
| 1 | 1.21 | 1.35 | 1.33 | 11 | 1.29 | 1.29 | 0.92 | 21 | 1.33 | 1.18 | 1.[illegible] |
| 2 | 1.21 | 1.27 | 1.35 | 12 | 1.36 | 1.27 | .94 | 22 | 1.38 | 1.19 | 1.19 |
| 3 | 1.25 | 1.33 | 1.33 | 13 | 1.38 | 1.29 | 1.12 | 23 | 1.38 | 1.00 | 1.12 |
| 4 | 1.25 | 1.29 | 1.21 | 14 | 1.21 | 1.27 | 1.25 | 24 | 1.38 | 1.02 | 1.11 |
| 5 | 1.25 | 1.31 | 1.21 | 15 | 1.29 | 1.27 | 1.25 | 25 | 1.29 | 1.06 | 1.[illegible] |
| 6 | 1.25 | 1.27 | 1.04 | 16 | 1.25 | 1.27 | 1.33 | 26 | 1.17 | 1.10 | 1.[illegible] |
| 7 | 1.17 | 1.39 | 1.29 | 17 | 1.33 | 1.10 | 1.37 | 27 | 1.25 | 1.10 | 1.[illegible] |
| 8 | 1.17 | 1.27 | 1.29 | 18 | 1.33 | 1.08 | 1.36 | 28 | 1.25 | 1.19 | 1.1[illegible] |
| 9 | 1.29 | 1.27 | 1.27 | 19 | 1.33 | 1.33 | 1.33 | 29 | 1.38 | 1.33 | 1.17 |
| 10 | 1.31 | 1.27 | 1.27 | 20 | 1.33 | 1.17 | 1.29 | 30 | 1.31 | 1.33 | 1.25 |
| | | | | | | | | 31 | 1.35 | 1.18 | ..... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1896–97. | | | | | | | | | | | | |
| 1 | 1.29 | 1.00 | 1.00 | 1.25 | 2.70 | 1.60 | 1.60 | 1.50 | 1.10 | 1.15 | 1.30 | ..... |
| 2 | 1.38 | 1.00 | 1.00 | 1.23 | 2.10 | 1.60 | 1.60 | 1.50 | 1.06 | 1.06 | 1.35 | ..... |
| 3 | 1.27 | 1.00 | 1.02 | 1.00 | 1.85 | 1.55 | 1.55 | 1.50 | 1.10 | 1.10 | 1.35 | ..... |
| 4 | 1.25 | 1.00 | 1.02 | 1.00 | 1.85 | 1.50 | 1.60 | 1.50 | 1.15 | 1.15 | 1.35 | ..... |
| 5 | 1.14 | 1.00 | 1.02 | 1.00 | 1.65 | 1.45 | 1.60 | 1.50 | 1.10 | 1.10 | 1.35 | ..... |
| 6 | 1.12 | 1.00 | 1.02 | .96 | 1.65 | 1.60 | 1.65 | 1.50 | 1.05 | 1.10 | 1.30 | ..... |
| 7 | 1.21 | .96 | 1.02 | .92 | 1.65 | 2.50 | 1.70 | 1.50 | 1.05 | 1.10 | 1.30 | ..... |
| 8 | 1.21 | .96 | 1.02 | .92 | 1.80 | 1.65 | 1.70 | 1.45 | 1.05 | 1.15 | 1.35 | ..... |
| 9 | 1.17 | .96 | 1.02 | .92 | 1.85 | 1.65 | 1.65 | 1.40 | 1.05 | 1.20 | 1.35 | ..... |
| 10 | 1.25 | .96 | 1.02 | .92 | 1.65 | 1.60 | 1.65 | 1.30 | 1.10 | 1.15 | 1.35 | ..... |
| 11 | 1.29 | .96 | 1.02 | 1.12 | 1.50 | 1.50 | 1.75 | 1.30 | 1.10 | 1.20 | 1.35 | ..... |
| 12 | 1.25 | .98 | 1.02 | 1.10 | 1.50 | 1.50 | 1.75 | 1.30 | 1.10 | 1.20 | 1.40 | ..... |
| 13 | 1.17 | .96 | 1.02 | 1.16 | 1.50 | 1.50 | 1.80 | 1.30 | 1.15 | 1.15 | 1.40 | ..... |
| 14 | 1.17 | .96 | 1.02 | 1.21 | 1.40 | 1.40 | 1.80 | 1.30 | 1.15 | 1.25 | 1.40 | ..... |
| 15 | 1.18 | .96 | 1.02 | 1.37 | 1.40 | 1.50 | 1.75 | 1.26 | 1.20 | 1.15 | 1.40 | ..... |
| 16 | 1.08 | .96 | 1.04 | 1.21 | 1.35 | 1.60 | 1.75 | 1.25 | 1.20 | 1.30 | 1.30 | ..... |
| 17 | 1.17 | .96 | 1.04 | 1.40 | 1.40 | 1.50 | 1.75 | 1.20 | 1.20 | 1.20 | 1.30 | ..... |
| 18 | 1.19 | .96 | 1.04 | 1.40 | 2.90 | 1.45 | 1.80 | 1.15 | 1.20 | 1.20 | 1.30 | ..... |
| 19 | 1.19 | .96 | 1.04 | 1.35 | 2.10 | 1.40 | 1.80 | 1.10 | 1.20 | 1.20 | 1.30 | ..... |
| 20 | 1.19 | .96 | 1.04 | 1.35 | 2.05 | 1.60 | 1.80 | 1.10 | 1.20 | 1.15 | 1.35 | ..... |
| 21 | 1.06 | .98 | 1.04 | 1.40 | 1.70 | 1.45 | 1.70 | 1.10 | 1.20 | 1.10 | 1.45 | ..... |
| 22 | 1.12 | .98 | 1.04 | 1.40 | 1.70 | 1.49 | 1.65 | 1.10 | 1.20 | 1.15 | 1.25 | ..... |
| 23 | 1.11 | 1.00 | 1.02 | 1.45 | 1.65 | 1.40 | 1.60 | 1.10 | 1.15 | 1.15 | 1.15 | ..... |
| 24 | 1.08 | 1.00 | 1.02 | 1.45 | 1.60 | 1.30 | 1.60 | 1.15 | 1.15 | 1.20 | 1.25 | ..... |
| 25 | 1.08 | 1.19 | 1.02 | 1.45 | 1.60 | 1.35 | 1.60 | 1.10 | 1.15 | 1.20 | 1.35 | ..... |

*Daily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1896-1903*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1896-97.** | | | | | | | | | | | | |
| 26 | 1.08 | 1.04 | 1.00 | 1.45 | 1.65 | 1.35 | 1.60 | 1.05 | 1.20 | 1.25 | 1.35 | ...... |
| 27 | 1.75 | 1.04 | 1.00 | 1.45 | 1.55 | 1.40 | 1.55 | 1.00 | 1.20 | 1.35 | 1.30 | ...... |
| 28 | 1.17 | 1.02 | 1.08 | 1.45 | 1.55 | 1.75 | 1.60 | 1.00 | 1.20 | 1.30 | 1.30 | ...... |
| 29 | 1.17 | 1.02 | 1.08 | 1.45 | ...... | 1.60 | 1.55 | 1.00 | 1.10 | 1.30 | 1.35 | ...... |
| 30 | 1.17 | 1.02 | 1.06 | 1.50 | ...... | 1.55 | 1.50 | .95 | 1.15 | 1.30 | 1.35 | ...... |
| 31 | 1.17 | ...... | 1.02 | 1.45 | ...... | 1.60 | ...... | .95 | ...... | 1.30 | 1.35 | ...... |
| **1897-98.** | | | | | | | | | | | | |
| 1 | 1.30 | 1.15 | 1.10 | 1.00 | 1.05 | 1.00 | 1.02 | 1.10 | 1.17 | 1.10 | 1.10 | 1.05 |
| 2 | 1.17 | 1.15 | 1.05 | 1.00 | 1.05 | 1.00 | 1.02 | 1.10 | 1.15 | 1.12 | 1.10 | 1.05 |
| 3 | 1.15 | 1.15 | 1.05 | 1.00 | 1.05 | .97 | 1.00 | .90 | 1.15 | 1.13 | 1.10 | 1.05 |
| 4 | 1.15 | 1.15 | 1.05 | 1.00 | 1.05 | .95 | 1.00 | .90 | 1.05 | 1.10 | 1.10 | 1.05 |
| 5 | 1.20 | 1.15 | 1.05 | 1.00 | 1.05 | .95 | 1.00 | .85 | 1.05 | 1.10 | 1.07 | 1.05 |
| 6 | 1.25 | 1.15 | 1.05 | 1.00 | 1.35 | 1.00 | 1.00 | .85 | 1.15 | 1.10 | 1.05 | .90 |
| 7 | 1.23 | 1.15 | 1.05 | 1.00 | 1.35 | 1.05 | 1.00 | .85 | 1.15 | 1.07 | 1.00 | .90 |
| 8 | 1.30 | 1.15 | 1.05 | 1.00 | 1.25 | 1.05 | 1.00 | .85 | 1.10 | 1.07 | 1.10 | .92 |
| 9 | 1.23 | 1.20 | 1.05 | 1.00 | 1.20 | 1.05 | 1.00 | .95 | 1.10 | 1.07 | 1.20 | 1.10 |
| 10 | 1.12 | 1.20 | 1.05 | 1.45 | 1.15 | 1.05 | 1.02 | .95 | 1.15 | 1.15 | 1.25 | 1.15 |
| 11 | 1.20 | 1.30 | 1.05 | 1.15 | 1.15 | 1.03 | 1.00 | 1.40 | 1.15 | 1.15 | 1.25 | 1.15 |
| 12 | 1.20 | 1.30 | 1.05 | 1.15 | 1.10 | 1.07 | .91 | 1.40 | 1.10 | 1.22 | 1.22 | 1.15 |
| 13 | 1.23 | 1.30 | 1.05 | 1.15 | 1.07 | 1.10 | .91 | 1.30 | 1.10 | 1.20 | 1.20 | 1.12 |
| 14 | 2.60 | 1.27 | 1.05 | 1.15 | 1.05 | 1.00 | 1.00 | 1.30 | 1.10 | 1.15 | 1.17 | 1.10 |
| 15 | 1.25 | 1.25 | 1.15 | 1.10 | 1.05 | 1.03 | 1.02 | 1.60 | 1.05 | 1.15 | 1.15 | 1.05 |
| 16 | 1.15 | 1.25 | 1.05 | 1.10 | 1.05 | 1.05 | 1.02 | 1.40 | 1.05 | 1.15 | 1.12 | 1.00 |
| 17 | 1.10 | 1.20 | .96 | 1.10 | 1.05 | 1.00 | 1.02 | 1.30 | 1.05 | 1.07 | 1.15 | .95 |
| 18 | .90 | 1.20 | 1.00 | 1.10 | 1.10 | .90 | .97 | 1.30 | 1.05 | 1.00 | 1.15 | 1.03 |
| 19 | .90 | 1.20 | 1.00 | 1.10 | 1.05 | .90 | .97 | 1.25 | 1.05 | 1.00 | 1.15 | 1.07 |
| 20 | .90 | 1.20 | .90 | 1.10 | 1.05 | .87 | .95 | 1.25 | 1.05 | 1.10 | 1.15 | 1.00 |
| 21 | .90 | 1.17 | .80 | 1.10 | 1.05 | 1.00 | .96 | 1.25 | 1.22 | 1.12 | 1.05 | 1.05 |
| 22 | .90 | 1.15 | .80 | 1.15 | 1.00 | .82 | .92 | 1.25 | 1.25 | 1.12 | 1.05 | 1.05 |
| 23 | .90 | 1.15 | .90 | 1.25 | 1.00 | .82 | .92 | 1.20 | 1.25 | 1.12 | 1.05 | 1.05 |
| 24 | .95 | 1.15 | .90 | 1.10 | 1.00 | .85 | .92 | 1.20 | 1.25 | 1.12 | 1.00 | 1.05 |
| 25 | .95 | 1.25 | 1.00 | 1.00 | 1.00 | .90 | .92 | 1.20 | 1.25 | 1.10 | 1.10 | 1.05 |
| 26 | 1.05 | 1.15 | 1.00 | 1.00 | 1.00 | 1.05 | .92 | 1.20 | 1.25 | 1.05 | 1.00 | .92 |
| 27 | 1.05 | 1.15 | 1.00 | 1.00 | 1.00 | .95 | .90 | 1.25 | 1.12 | 1.10 | 1.10 | .95 |
| 28 | 1.10 | 1.15 | 1.00 | 1.05 | 1.00 | 1.00 | .90 | 1.25 | 1.12 | 1.10 | 1.00 | 1.00 |
| 29 | 1.25 | 1.15 | 1.00 | 1.05 | ...... | 1.00 | .90 | 1.25 | 1.10 | 1.10 | 1.05 | 1.05 |
| 30 | 1.25 | 1.15 | 1.00 | 1.05 | ...... | 1.00 | .90 | 1.25 | 1.10 | 1.10 | 1.05 | 1.05 |
| 31 | 1.25 | ...... | 1.00 | 1.05 | ...... | 1.02 | ...... | 1.20 | ...... | 1.10 | 1.05 | ...... |
| **1898-99.** | | | | | | | | | | | | |
| 1 | 1.05 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.30 | 2.35 | 2.65 | 2.30 | 2.20 | 1.90 |
| 2 | 1.00 | ...... | 2.10 | 2.10 | 2.25 | 2.20 | 2.20 | 2.30 | 2.35 | 2.30 | 2.20 | 1.90 |
| 3 | .90 | ...... | 2.10 | 2.10 | 2.25 | 2.20 | 2.15 | 2.30 | 2.40 | 2.30 | 2.20 | 1.90 |
| 4 | .90 | ...... | 2.10 | 2.10 | 2.25 | 2.20 | 2.20 | 2.35 | 2.35 | 2.30 | 2.00 | 1.90 |
| 5 | .90 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.40 | 2.30 | 2.30 | 2.00 | 1.90 |
| 6 | .85 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.45 | 2.30 | 2.35 | 2.00 | 1.90 |
| 7 | .80 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.45 | 2.30 | 2.35 | 1.90 | 1.90 |
| 8 | .80 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.35 | 2.30 | 2.35 | 1.90 | 1.90 |
| 9 | 1.00 | ...... | 2.20 | 2.10 | 2.20 | 2.20 | 2.15 | 2.25 | 2.30 | 2.35 | 1.90 | 1.90 |
| 10 | 1.00 | 2.10 | 2.10 | 2.10 | 2.20 | 2.20 | 2.15 | 2.25 | 2.25 | 2.37 | 1.90 | 1.90 |
| 11 | .97 | 2.10 | 2.10 | 2.30 | 2.20 | 2.20 | 2.15 | 2.30 | 2.25 | 2.37 | 1.90 | 1.90 |
| 12 | .95 | 2.10 | 2.10 | 2.30 | 2.20 | 2.20 | 2.15 | 2.30 | 2.25 | 2.35 | 1.90 | 1.90 |
| 13 | .95 | 2.10 | 2.10 | 2.30 | 2.20 | 2.15 | 2.15 | 2.35 | 2.30 | 2.35 | 1.90 | 1.90 |
| 14 | .95 | 2.10 | 2.10 | 2.30 | 2.20 | 2.15 | 2.10 | 2.35 | 2.30 | 2.35 | 1.90 | 1.90 |
| 15 | .95 | 2.10 | 2.10 | 2.20 | 2.20 | 2.15 | 2.10 | 2.30 | 2.30 | 2.30 | 1.90 | 1.90 |
| 16 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.40 | 2.30 | 2.25 | 2.30 | 1.90 | 1.90 |
| 17 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.25 | 2.35 | 2.30 | 2.30 | 2.30 | 1.90 | 1.90 |
| 18 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.35 | 2.35 | 2.25 | 2.30 | 2.30 | 1.90 | 1.80 |
| 19 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.30 | 2.35 | 2.25 | 2.20 | 2.30 | 1.90 | 1.80 |
| 20 | ...... | 2.30 | 2.10 | 2.20 | 2.20 | 2.55 | 2.30 | 2.25 | 2.30 | 2.25 | 1.87 | 1.80 |
| 21 | ...... | 2.20 | 2.10 | 2.20 | 2.20 | 2.55 | 2.30 | 2.30 | 2.30 | 2.20 | 1.87 | 1.80 |
| 22 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.30 | 2.30 | 2.20 | 2.25 | 2.25 | 1.87 | 1.80 |
| 23 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.30 | 2.30 | 2.25 | 2.25 | 2.25 | 1.87 | 1.85 |
| 24 | ...... | 2.10 | 2.10 | 2.20 | 2.30 | 2.35 | 2.35 | 2.30 | 2.25 | 2.25 | 1.87 | 1.85 |
| 25 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.35 | 2.40 | 2.30 | 2.30 | 2.50 | 1.90 | 1.85 |
| 26 | ...... | 2.10 | 2.10 | 2.20 | 2.25 | 2.35 | 2.40 | 2.30 | 2.35 | 2.50 | 1.90 | 1.90 |
| 27 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.40 | 2.40 | 2.25 | 2.30 | 2.30 | 1.90 | 1.90 |
| 28 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.35 | 2.40 | 2.30 | 2.30 | 2.27 | 1.90 | 1.90 |
| 29 | ...... | 3.10 | 2.10 | 2.20 | ...... | 2.35 | 2.40 | 2.30 | 2.28 | 2.25 | 1.90 | 1.90 |
| 30 | ...... | 2.10 | 2.10 | 2.20 | ...... | 2.35 | 2.35 | 2.30 | 2.28 | 2.20 | 1.90 | 1.90 |
| 31 | ...... | ...... | 2.10 | 2.20 | ...... | 2.30 | ...... | 2.30 | ...... | 2.20 | 1.90 | ...... |

[illegible]

[illegible]

*Daily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1896–1903*—Con.

| Day. | Feb. | Mar. | Apr. | Day. | Feb. | Mar. | Apr. | Day. | Feb. | Mar. | Apr. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902. | | | | 1902. | | | | 1902. | | | |
| 1 | ...... | 1.50 | 1.35 | 11 | ...... | 1.55 | 1.27 | 21 | ...... | 1.22 | 1.45 |
| 2 | ...... | 2.8 | 1.4 | 12 | ...... | 1.55 | 1.27 | 22 | ...... | 1.25 | 1.30 |
| 3 | ...... | 1.60 | 1.40 | 13 | ...... | 1.55 | 1.25 | 23 | ...... | 1.30 | 1.31 |
| 4 | ...... | 1.50 | 1.40 | 14 | ...... | 1.55 | 1.24 | 24 | ...... | 1.40 | ...... |
| 5 | ...... | 1.50 | 1.45 | 15 | ...... | 1.35 | 1.24 | 25 | ...... | 1.45 | ...... |
| 6 | ...... | 1.25 | 1.33 | 16 | ...... | 1.23 | 1.24 | 26 | 2.20 | 1.50 | ...... |
| 7 | ...... | 1.45 | 1.35 | 17 | ...... | 1.25 | 1.23 | 27 | 1.60 | 1.55 | ...... |
| 8 | ...... | 1.36 | 1.38 | 18 | ...... | 1.25 | 1.23 | 28 | 1.50 | 1.53 | ...... |
| 9 | ...... | 2.03 | 1.30 | 19 | ...... | 1.30 | 1.24 | 29 | ...... | 1.53 | ...... |
| 10 | ...... | 1.70 | 1.30 | 20 | ...... | 1.25 | 1.25 | 30 | ...... | 1.50 | ...... |
| | | | | | | | | 31 | ...... | 1.45 | ...... |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903. | | | | | | | 1903. | | | | | | |
| 1 | 1.13 | 1.7 | 1.3 | 7.00 | 1.0 | 0.65 | 16 | 0.95 | 1.35 | 1.35 | 1.1 | 0.8 | 0.3 |
| 2 | 1.13 | 1.35 | 1.3 | 3.3 | 1.0 | .65 | 17 | .95 | 1.35 | 1.35 | 1.4 | .8 | .25 |
| 3 | 1.13 | 1.35 | 1.3 | 2.5 | 1.0 | .65 | 18 | .95 | 1.3 | 1.35 | 1.3 | .8 | .2 |
| 4 | 1.13 | 1.3 | 1.5 | 2.0 | .95 | .65 | 19 | .95 | 1.3 | 1.35 | 1.2 | .8 | .2 |
| 5 | 1.07 | 1.3 | 1.8 | 2.0 | .9 | .65 | 20 | .95 | 1.3 | 1.3 | 1.2 | .8 | .2 |
| 6 | 1.07 | 1.3 | 1.5 | 1.5 | .9 | .65 | 21 | .95 | 1.35 | 1.3 | 1.2 | .75 | .2 |
| 7 | 1.07 | 1.35 | 1.4 | 1.4 | .85 | .6 | 22 | .95 | 1.35 | 1.3 | 1.1 | 1.0 | .2 |
| 8 | 1.05 | 1.35 | 1.4 | 1.35 | .8 | .6 | 23 | 1.05 | 1.35 | 1.3 | 1.05 | .75 | ...... |
| 9 | 1.05 | 1.4 | 1.4 | 1.2 | .8 | .6 | 24 | 1.1 | 1.35 | 1.4 | 1.1 | .75 | ...... |
| 10 | 1.05 | 1.4 | 1.35 | 1.0 | .8 | .55 | 25 | 1.13 | 1.35 | 1.9 | 1.1 | .75 | ...... |
| 11 | 1.05 | 1.45 | 1.3 | 1.0 | .8 | .55 | 26 | 1.13 | 1.35 | 2.4 | 1.1 | .75 | ...... |
| 12 | 1.05 | 1.45 | 1.3 | 1.0 | .8 | .5 | 27 | 1.13 | 1.35 | 1.8 | 1.1 | .7 | ...... |
| 13 | .95 | 1.45 | 1.32 | 1.0 | .8 | .5 | 28 | 2.3 | 1.35 | 1.8 | 1.1 | .7 | ...... |
| 14 | .95 | 1.45 | 1.32 | .95 | .8 | .4 | 29 | 1.5 | ...... | 1.8 | 1.0 | .67 | ...... |
| 15 | .95 | 1.45 | 1.35 | .95 | .8 | .35 | 30 | 1.5 | ...... | 1.9 | 1.0 | .65 | ...... |
| | | | | | | | 31 | 1.5 | ...... | 4.9 | ...... | .65 | ...... |

NOTE.—On Nov. 9, 1898, the station was moved downstream and a new gage established 800 feet below the mouth of Warm Springs canyon. On Jan. 1, 1901, the station was moved back to the former location and the old gage read thereafter.

Discharge record was obtained by measurements over weirs in the canals at mouth of canyon during June 1, 1901, to Feb. 25, 1902; Apr. 24 to Dec. 31, 1902; and June 23, 1903, to Dec. 31, 1904.

*Daily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1905–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | | | | |
| 1 | 0.85 | 0.8 | 1.3 | 1.7 | 1.3 | 2.3 | 1.4 | 1.3 | 1.3 |
| 2 | .85 | 2.5 | 1.3 | 2.05 | 2.2 | 2.3 | 1.4 | 1.3 | 1.3 |
| 3 | .85 | 2.3 | 1.3 | 2.05 | 2.0 | 2.3 | 1.4 | 1.3 | 1.3 |
| 4 | .85 | 2.8 | 1.3 | 1.35 | 2.0 | 2.3 | 1.4 | 1.3 | 1.3 |
| 5 | .85 | 3.0 | 1.3 | 1.35 | 1.9 | 2.3 | 1.4 | 1.3 | 1.3 |
| 6 | .85 | 1.9 | 1.25 | 1.35 | 1.9 | 2.25 | 1.4 | 1.3 | 1.3 |
| 7 | .85 | 1.9 | 1.25 | 1.35 | 2.0 | 2.25 | 1.4 | 1.3 | 1.3 |
| 8 | .85 | 1.75 | 1.25 | 1.35 | 2.3 | 2.2 | 1.4 | 1.3 | 1.3 |
| 9 | 2.0 | 1.5 | 1.25 | 1.35 | 2.2 | 2.2 | 1.4 | 1.3 | 1.3 |
| 10 | 1.0 | 1.5 | 1.25 | 1.35 | 2.2 | 2.2 | 1.4 | 1.3 | 1.3 |
| 11 | .85 | 1.35 | 1.25 | 1.35 | 2.2 | 2.15 | 1.4 | 1.3 | 1.3 |
| 12 | .85 | 1.25 | 1.3 | 1.35 | 2.2 | 1.6 | 1.4 | 1.3 | 1.3 |
| 13 | .85 | 1.15 | 3.4 | 1.3 | 2.2 | 1.75 | 1.4 | 1.3 | 1.3 |
| 14 | .85 | 1.1 | 2.6 | 1.3 | 2.5 | 1.6 | 1.4 | 1.3 | 1.3 |
| 15 | .85 | 1.1 | 2.35 | 1.3 | 2.5 | 1.45 | 1.4 | 1.3 | 1.3 |
| 16 | .8 | 2.8 | 2.4 | 1.3 | 2.6 | 1.45 | 1.35 | 1.3 | 1.3 |
| 17 | .8 | 2.1 | 2.5 | 2.2 | 2.6 | 1.6 | 1.35 | 1.3 | 1.3 |
| 18 | .8 | 1.9 | 2.6 | 2.0 | 2.5 | 1.6 | 1.35 | 1.3 | 1.3 |
| 19 | .8 | 1.9 | 2.5 | 2.1 | 2.6 | 1.55 | 1.35 | 1.3 | 1.3 |
| 20 | .8 | 1.8 | 2.6 | 1.2 | 2.6 | 1.55 | 1.35 | 1.3 | 1.3 |

*Daily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1905–1912*—Con.

| Day | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1905.** | | | | | | | | | |
| 21 | 1.65 | 1.7 | 2.5 | 1.15 | 2.5 | 1.45 | 1.35 | 1.3 | [illegible] |
| 22 | .85 | 1.7 | 2.4 | 1.2 | 2.2 | 1.45 | 1.35 | 1.3 | [illegible] |
| 23 | .85 | 1.5 | 2.0 | 1.4 | 2.2 | 1.45 | 1.35 | 1.3 | [illegible] |
| 24 | .85 | 1.3 | 1.9 | 1.4 | 2.1 | 1.45 | 1.3 | 1.3 | [illegible] |
| 25 | .85 | 1.35 | 1.9 | 1.3 | 2.3 | 1.45 | 1.3 | 1.3 | [illegible] |
| 26 | .85 | 1.25 | 1.9 | 1.3 | 2.2 | 1.45 | 1.3 | 1.3 | [illegible] |
| 27 | .85 | 1.35 | 1.8 | 1.3 | 2.2 | 1.45 | 1.3 | 1.3 | [illegible] |
| 28 | .85 | 1.3 | 1.65 | 1.25 | 2.4 | 1.4 | 1.3 | 1.3 | [illegible] |
| 29 | .8 | ........ | 1.5 | 1.2 | 2.4 | 1.4 | 1.3 | 1.3 | [illegible] |
| 30 | .8 | ........ | 2.0 | 1.2 | 2.4 | 1.4 | 1.3 | 1.3 | [illegible] |
| 31 | .8 | ........ | 1.8 | ........ | 2.4 | ........ | 1.3 | 1.3 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1905–6.** | | | | | | | | | | | | |
| 1 | 1.3 | 1.3 | 1.5 | 1.3 | 1.3 | 1.9 | 3.9 | 3.1 | 4.0 | 3.0 | 2.6 | [illegible] |
| 2 | 1.3 | 1.3 | 1.5 | 1.3 | 1.3 | 1.9 | 3.4 | 3.0 | 3.5 | 3.0 | 2.6 | [illegible] |
| 3 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.7 | 3.3 | 2.9 | 3.5 | 2.9 | 2.5 | [illegible] |
| 4 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.6 | 3.4 | 2.9 | 3.3 | 2.9 | 2.5 | [illegible] |
| 5 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.5 | 3.4 | 3.6 | 3.3 | 3.0 | 2.4 | [illegible] |
| 6 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.5 | 3.3 | 3.7 | 3.3 | 3.0 | 2.4 | [illegible] |
| 7 | 1.3 | 1.35 | 1.4 | 1.3 | 1.3 | 1.4 | 3.2 | 3.4 | 3.2 | 3.0 | 2.4 | [illegible] |
| 8 | 1.3 | 1.4 | 1.4 | 1.3 | 1.3 | 1.4 | 3.1 | 3.8 | 3.2 | 3.0 | 2.4 | [illegible] |
| 9 | 1.3 | 1.35 | 1.4 | 1.3 | 1.3 | 1.4 | 3.0 | 3.8 | 3.2 | 2.9 | 2.4 | [illegible] |
| 10 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.4 | 3.0 | 3.8 | 3.2 | 2.9 | 2.4 | [illegible] |
| 11 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.4 | 3.0 | 3.8 | 3.4 | 2.9 | 2.4 | [illegible] |
| 12 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 6.5 | 2.9 | 3.6 | 3.2 | 2.9 | 2.4 | [illegible] |
| 13 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 4.5 | 2.9 | 3.6 | 3.2 | 2.9 | 2.6 | [illegible] |
| 14 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 3.4 | 3.0 | 3.4 | 3.2 | 2.9 | 2.6 | [illegible] |
| 15 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 3.0 | 2.9 | 3.3 | 3.2 | 2.9 | 2.5 | [illegible] |
| 16 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 5.0 | 2.9 | 3.3 | 3.2 | 3.0 | 2.6 | [illegible] |
| 17 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 4.15 | 2.9 | 3.2 | 3.1 | 2.9 | 2.9 | [illegible] |
| 18 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 3.7 | 2.9 | 3.2 | 3.1 | 2.9 | 3.0 | [illegible] |
| 19 | 1.3 | 1.35 | 1.6 | 2.4 | 1.3 | 3.45 | 2.9 | 3.2 | 3.1 | 2.8 | 2.7 | [illegible] |
| 20 | 1.3 | 1.35 | 2.2 | 2.2 | 1.3 | 3.25 | 3.0 | 3.2 | 3.1 | 2.8 | 2.6 | [illegible] |
| 21 | 1.3 | 1.4 | 1.6 | 1.7 | 1.3 | 3.15 | 3.5 | 3.2 | 3.1 | 2.7 | 2.5 | [illegible] |
| 22 | 1.3 | 1.35 | 1.5 | 1.5 | 1.9 | 3.1 | 3.8 | 3.4 | 3.1 | 2.8 | 2.4 | [illegible] |
| 23 | 1.3 | 1.35 | 1.5 | 1.5 | 2.0 | 3.05 | 3.9 | 3.5 | 3.1 | 2.8 | 2.3 | [illegible] |
| 24 | 1.3 | 1.35 | 1.5 | 1.4 | 2.0 | 4.6 | 3.9 | 3.5 | 3.4 | 2.9 | 2.1 | [illegible] |
| 25 | 1.3 | 1.35 | 1.5 | 1.4 | 2.0 | 4.95 | 3.7 | 3.2 | 3.1 | 2.8 | 2.0 | [illegible] |
| 26 | 1.3 | 1.8 | 1.5 | 1.3 | 2.0 | 5.8 | 3.7 | 3.2 | 3.0 | 2.8 | 2.3 | [illegible] |
| 27 | 1.3 | 2.5 | 1.5 | 1.3 | 2.0 | 5.2 | 3.1 | 3.3 | 3.1 | 2.8 | 2.3 | [illegible] |
| 28 | 1.3 | 2.9 | 1.5 | 1.3 | 2.0 | 4.9 | 3.3 | 4.9 | 3.1 | 2.7 | 2.3 | [illegible] |
| 29 | 1.3 | 1.7 | 2.0 | 1.3 | ........ | 4.6 | 3.8 | 4.4 | 3.0 | 2.7 | 2.3 | [illegible] |
| 30 | 1.3 | 1.5 | 1.6 | 1.3 | ........ | 4.3 | 3.8 | 4.3 | 3.0 | 2.7 | 2.3 | [illegible] |
| 31 | 1.3 | ........ | 1.5 | 1.3 | ........ | 4.2 | ........ | 4.0 | ........ | 2.6 | 2.3 | ........ |
| **1906–7.** | | | | | | | | | | | | |
| 1 | 2.5 | 2.3 | 2.3 | 2.7 | 3.5 | 3.4 | 4.2 | 3.7 | 3.0 | 2.8 | 2.4 | [illegible] |
| 2 | 2.5 | 2.3 | 2.3 | 2.6 | 3.5 | 3.6 | 4.3 | 3.7 | 3.0 | 2.8 | 2.4 | [illegible] |
| 3 | 2.5 | 2.3 | 2.4 | 2.5 | 3.7 | 3.2 | 4.4 | 3.6 | 3.0 | 2.8 | 2.4 | [illegible] |
| 4 | 2.5 | 2.3 | 2.7 | 2.5 | 3.8 | 3.3 | 4.3 | 3.4 | 3.0 | 2.8 | 2.3 | [illegible] |
| 5 | 2.5 | 2.3 | 2.7 | 2.5 | 3.8 | 5.3 | 4.2 | 3.4 | 3.0 | 2.8 | 2.3 | 2.0 |
| 6 | 2.5 | 2.3 | 2.3 | 3.0 | 3.8 | 4.4 | 4.2 | 3.4 | 3.0 | 2.8 | 2.3 | [illegible] |
| 7 | 2.5 | 2.3 | 2.3 | 3.0 | 3.4 | 4.1 | 4.2 | 3.1 | 3.0 | 2.8 | 2.3 | [illegible] |
| 8 | 2.5 | 2.3 | 2.3 | 3.0 | 3.4 | 4.5 | 4.3 | 3.1 | 3.0 | 2.8 | 2.3 | [illegible] |
| 9 | 2.5 | 2.3 | 2.3 | 3.0 | 3.2 | 4.4 | 4.3 | 3.0 | 3.0 | 2.8 | 2.2 | [illegible] |
| 10 | 2.5 | 2.3 | 2.3 | 4.5 | 3.1 | 3.7 | 4.3 | 3.5 | 3.0 | 2.7 | 2.2 | [illegible] |
| 11 | 2.5 | 2.3 | 2.3 | 3.6 | 3.1 | 4.2 | 4.3 | 3.4 | 3.0 | 2.7 | 2.2 | 1.9 |
| 12 | 2.5 | 2.3 | 5.2 | 3.6 | 3.0 | 4.1 | 4.3 | 3.4 | 3.0 | 2.7 | 2.2 | [illegible] |
| 13 | 2.5 | 2.3 | 3.2 | 3.7 | 3.0 | 4.0 | 4.3 | 3.4 | 3.0 | 2.7 | 2.2 | [illegible] |
| 14 | 2.5 | 2.3 | 2.9 | 3.8 | 3.0 | 4.0 | 4.3 | 3.2 | 3.0 | 2.7 | 2.2 | 1.9 |
| 15 | 2.5 | 2.3 | 2.3 | 3.7 | 2.9 | 3.4 | 4.3 | 3.2 | 3.0 | 2.7 | 2.1 | 1.9 |
| 16 | 2.5 | 2.3 | 2.4 | 3.8 | 2.9 | 3.4 | 4.3 | 3.0 | 3.0 | 2.7 | 2.1 | 1.9 |
| 17 | 2.5 | 2.3 | 2.4 | 3.8 | 3.1 | 3.4 | 3.7 | 3.0 | 2.9 | 2.7 | 2.1 | [illegible] |
| 18 | 2.5 | 2.3 | 2.2 | 4.0 | 3.0 | 3.5 | 3.6 | 3.0 | 2.8 | 2.6 | 2.1 | [illegible] |
| 19 | 2.5 | 2.3 | 2.2 | 3.9 | 2.9 | 4.1 | 3.8 | 3.6 | 2.8 | 2.6 | 2.1 | [illegible] |
| 20 | 2.5 | 2.3 | 2.0 | 3.6 | 2.3 | 4.4 | 4.3 | 3.6 | 2.8 | 2.6 | 2.0 | 3.1 |

*Daily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1905–1912*.—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | | | | | | | |
| 21 | 2.3 | 2.3 | 2.0 | 3.6 | 3.6 | 6.0 | 4.2 | 3.6 | 2.8 | 2.6 | 2.1 | 1.9 |
| 22 | 2.3 | 2.3 | 2.0 | 3.6 | 4.4 | 4.9 | 4.1 | 3.2 | 2.8 | 2.5 | 2.1 | 1.9 |
| 23 | 2.3 | 2.3 | 2.0 | 3.6 | 4.4 | 4.8 | 3.7 | 3.2 | 2.8 | 2.5 | 2.1 | 1.9 |
| 24 | 2.3 | 2.3 | 2.0 | 3.6 | 4.1 | 4.6 | 3.6 | 3.2 | 2.8 | 2.5 | 2.1 | 1.9 |
| 25 | 2.3 | 2.3 | 2.0 | 3.0 | 4.0 | 4.8 | 3.6 | 3.1 | 2.8 | 2.5 | 2.1 | 1.9 |
| 26 | 2.3 | 2.3 | 2.0 | 2.9 | 4.0 | 4.7 | 3.6 | 3.1 | 2.8 | 2.5 | 2.1 | 1.9 |
| 27 | 2.3 | 2.3 | 3.2 | 2.9 | 4.0 | 4.7 | 3.7 | 3.2 | 2.8 | 2.5 | 2.1 | 1.9 |
| 28 | 2.3 | 2.3 | 3.5 | 2.9 | 3.4 | 4.5 | 3.7 | 3.1 | 2.7 | 2.5 | 2.1 | 1.9 |
| 29 | 2.3 | 2.3 | 3.5 | 2.9 | ...... | 4.4 | 3.4 | 3.1 | 2.7 | 2.4 | 2.1 | 1.9 |
| 30 | 2.3 | 2.3 | 2.1 | 3.4 | ...... | 4.3 | 3.7 | 3.0 | 2.8 | 2.4 | 2.1 | 1.9 |
| 31 | 2.3 | ...... | 2.8 | 3.0 | ...... | 4.2 | ...... | 3.0 | ...... | 2.4 | 2.1 | ...... |
| 1907–8. | | | | | | | | | | | | |
| 1 | 1.9 | 2.4 | 1.9 | 1.7 | 2.0 | 3.0 | 2.7 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 |
| 2 | 1.9 | 2.4 | 1.9 | 1.7 | 2.9 | 2.9 | 2.6 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 |
| 3 | 1.9 | 2.4 | 1.8 | 1.7 | 2.9 | 2.9 | 2.4 | 2.4 | 1.8 | 1.8 | 1.8 | 1.8 |
| 4 | 1.9 | 2.7 | 1.8 | 1.7 | 3.6 | 3.0 | 2.2 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 |
| 5 | 2.0 | 2.7 | 1.8 | 1.7 | 2.8 | 3.0 | 2.1 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 |
| 6 | 2.0 | 2.7 | 1.8 | 1.7 | 2.5 | 2.5 | 2.0 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 |
| 7 | 1.9 | 2.3 | 1.8 | 1.7 | 2.3 | 2.4 | 2.0 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 |
| 8 | 1.9 | 2.0 | 1.8 | 1.7 | 2.2 | 2.4 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 |
| 9 | 1.9 | 1.9 | 1.8 | 1.7 | 2.1 | 2.1 | 1.9 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 |
| 10 | 1.9 | 2.3 | 1.8 | 1.7 | 2.2 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 11 | 1.9 | 2.7 | 1.8 | 1.7 | 2.2 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 12 | 1.9 | 2.7 | 1.8 | 1.7 | 2.2 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 13 | 1.9 | 2.7 | 1.8 | 1.7 | 2.1 | 2.0 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 14 | 1.9 | 2.7 | 1.8 | 1.7 | 2.0 | 2.0 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 15 | 1.9 | 2.7 | 1.8 | 1.7 | 2.7 | 2.2 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 16 | 2.2 | 2.7 | 1.8 | 1.7 | 2.6 | 2.2 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 17 | 2.1 | 2.7 | 1.8 | 1.7 | 2.6 | 2.2 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 18 | 2.1 | 2.7 | 1.7 | 1.7 | 2.6 | 2.9 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 19 | 2.1 | 2.6 | 1.7 | 1.7 | 2.6 | 3.0 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 20 | 2.0 | 2.6 | 1.7 | 1.7 | 2.6 | 3.0 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 21 | 2.0 | 2.6 | 1.7 | 1.7 | 2.6 | 3.0 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 22 | 1.9 | 2.6 | 1.7 | 1.7 | 2.6 | 3.0 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 23 | 2.0 | 2.5 | 1.7 | 1.7 | 2.6 | 3.0 | 2.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 24 | 2.5 | 2.5 | 1.7 | 3.0 | 2.6 | 2.9 | 2.3 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 25 | 2.2 | 1.9 | 1.7 | 3.4 | 2.6 | 2.9 | 2.3 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 26 | 2.1 | 1.9 | 1.7 | 2.8 | 2.6 | 2.3 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 27 | 2.1 | 1.9 | 1.7 | 2.4 | 2.7 | 2.4 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 28 | 2.4 | 1.9 | 1.7 | 3.0 | 2.7 | 2.4 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 29 | 2.4 | 1.9 | 1.7 | 3.2 | 3.3 | 2.6 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 30 | 2.4 | 1.9 | 1.7 | 3.0 | ...... | 2.7 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 31 | 2.4 | ...... | 1.7 | 3.0 | ...... | 2.7 | ...... | 1.8 | ...... | 1.8 | 1.8 | ...... |
| 1908–9. | | | | | | | | | | | | |
| 1 | 1.8 | 1.8 | 1.8 | 1.8 | 2.3 | 2.9 | 3.3 | 3.4 | 2.5 | 2.2 | 2.2 | 2.2 |
| 2 | 1.8 | 1.8 | 1.8 | 1.8 | 2.2 | 2.9 | 3.8 | 3.5 | 2.5 | 2.2 | 2.2 | 2.2 |
| 3 | 1.8 | 1.8 | 1.8 | 1.8 | 2.1 | 2.9 | 3.7 | 3.4 | 2.5 | 2.2 | 2.2 | 2.2 |
| 4 | 1.8 | 1.8 | 1.8 | 1.8 | 3.0 | 2.8 | 3.7 | 3.3 | 2.5 | 2.2 | 2.2 | 2.2 |
| 5 | 1.8 | 1.8 | 1.8 | 1.8 | 2.6 | 2.8 | 3.7 | 3.3 | 2.6 | 2.2 | 2.2 | 2.2 |
| 6 | 1.8 | 1.8 | 1.8 | 1.8 | 2.5 | 2.8 | 3.7 | 3.3 | 3.4 | 2.2 | 2.2 | 2.2 |
| 7 | 1.8 | 1.8 | 1.8 | 1.8 | 4.5 | 2.8 | 3.3 | 3.4 | 3.4 | 2.2 | 2.2 | 2.2 |
| 8 | 1.8 | 1.8 | 1.8 | 1.8 | 4.1 | 2.8 | 2.9 | 3.4 | 3.4 | 2.2 | 2.2 | 2.2 |
| 9 | 1.8 | 1.8 | 1.8 | 1.8 | 3.5 | 2.7 | 2.9 | 3.0 | 2.7 | 2.2 | 2.2 | 2.2 |
| 10 | 1.8 | 1.8 | 1.8 | 1.8 | 3.3 | 2.7 | 2.9 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| 11 | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 2.7 | 2.9 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| 12 | 1.8 | 1.8 | 1.8 | 1.8 | 3.8 | 2.6 | 2.9 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| 13 | 1.8 | 1.8 | 1.8 | 1.8 | 4.6 | 2.6 | 2.8 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| 14 | 1.8 | 1.8 | 1.8 | 2.3 | 4.0 | 2.5 | 2.9 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| 15 | 1.8 | 1.8 | 1.8 | 1.8 | 3.9 | 2.5 | 3.0 | 3.0 | 2.7 | 2.2 | 2.2 | 2.2 |
| 16 | 1.8 | 1.8 | 1.8 | 1.8 | 3.6 | 2.5 | 3.1 | 3.0 | 2.6 | 2.2 | 2.2 | 2.2 |
| 17 | 1.8 | 1.8 | 1.8 | 1.8 | 3.5 | 2.5 | 3.1 | 2.9 | 2.4 | 2.2 | 2.3 | 2.2 |
| 18 | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 3.1 | 3.3 | 2.8 | 2.3 | 2.2 | 2.5 | 2.2 |
| 19 | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 3.1 | 3.3 | 2.8 | 2.5 | 2.2 | 2.3 | 2.2 |
| 20 | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 3.1 | 3.3 | 2.8 | 2.4 | 2.2 | 2.2 | 2.2 |
| 21 | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 3.2 | 3.1 | 2.7 | 2.3 | 2.2 | 2.2 | 2.2 |
| 22 | 1.8 | 1.8 | 1.8 | 5.5 | 3.2 | 3.2 | 3.4 | 2.7 | 2.2 | 2.2 | 2.2 | 2.2 |
| 23 | 1.8 | 1.8 | 1.8 | 3.6 | 3.2 | 3.3 | 3.4 | 2.7 | 2.2 | 2.2 | 2.2 | 2.2 |
| 24 | 1.8 | 1.8 | 1.8 | 3.1 | 3.2 | 3.7 | 3.4 | 2.7 | 2.2 | 2.2 | 2.2 | 2.2 |
| 25 | 1.8 | 1.8 | 1.8 | 2.8 | 3.1 | 3.7 | 3.4 | 2.9 | 2.2 | 2.2 | 2.2 | 2.2 |

*Discharge measurements of Santa Ana River and Pacific Light and Power Co.'s canal near Mentone, Cal., in 189[illegible]–19[illegible]—Continued.*

| Date. | Hydrographer. | Gage height at mouth of river. | Discharge. River. | Discharge. Canal. | Discharge. Total in river. |
|---|---|---|---|---|---|
| | | Feet. | Sec.-ft. | Sec.-ft. | Sec.-ft. |
| [illegible] | | | | | |
| [illegible] | [illegible] | [illegible] | 6 | 1 | [illegible] |
| [illegible] | [illegible] | [illegible] | 5 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 6 | [illegible] | [illegible] |
| Sept. [illegible] | [illegible] | [illegible] | 4 | 2 | [illegible] |
| [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] |
| [illegible] | | | | | |
| Jan. [illegible] | [illegible] | [illegible] | 9 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 3 | [illegible] | 4 |
| [illegible] | [illegible] | .9 | [illegible] | 1 | [illegible] |
| June [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3 |
| [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] |
| Sept. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Dec. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 |
| [illegible] | | | | | |
| Jan. [illegible] | [illegible] Bennet | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Mar. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 2 | [illegible] | [illegible] |
| June [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | 2 | | [illegible] |
| Aug. [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | | | | | |
| Apr. [illegible] | [illegible] Bennet | [illegible] | [illegible] | | [illegible] |
| May [illegible] | [illegible] | [illegible] | 24 | | [illegible] |
| July [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| Nov. [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | | | | | |
| Jan. [illegible] | [illegible] Bennet | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| Mar. [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Aug. [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| Oct. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Dec. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | | |
| Apr. [illegible] | [illegible] Bennet | [illegible] | [illegible] | [illegible] | [illegible] |
| May [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July [illegible] | [illegible] | [illegible] | 7 | [illegible] | [illegible] |
| Sept. [illegible] | W. [illegible] Craig | [illegible] | 11 | [illegible] | [illegible] |
| Nov. [illegible] | [illegible] Bennet | [illegible] | 7 | [illegible] | [illegible] |
| [illegible] | | | | | |
| Feb. [illegible] | W. [illegible] Craig | [illegible] | [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | [illegible] | [illegible] | [illegible] | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | |
| [illegible] | [illegible] | [illegible] | [illegible] | | |
| [illegible] | Craig and [illegible] | [illegible] | [illegible] | | |
| May [illegible] | W. [illegible] Craig | [illegible] | [illegible] | | |
| June [illegible] | [illegible] | [illegible] | [illegible] | | |
| Aug. [illegible] | [illegible] | | | [illegible] | |
| Oct. [illegible] | [illegible] | | | [illegible] | |
| [illegible] | | | | | |
| Jan. [illegible] | W. [illegible] Craig | | | [illegible] | [illegible] |
| Mar. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 33 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 43 |
| [illegible] | Craig and Murphy | [illegible] | [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | W. [illegible] Craig | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June [illegible] | [illegible] | 1.45 | 24 | [illegible] | 46 |
| Sept. [illegible] | [illegible] | | 2 | [illegible] | 58 |
| Nov. [illegible] | [illegible] | .85 | 1 | 18 | 19 |

*a* New gage installed 100 feet below mouth of canyon. *b* Station moved back to old gage Jan. 1, 1901.

*Discharge measurements of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., in 1896-1912*—Continued.

| Date. | Hydrographer. | Gage height of river. | Discharge. River. | Discharge. Canal. | Discharge. Total for river. |
|---|---|---|---|---|---|
| 1905. | | *Feet.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Feb. 13 | Clapp and La Rue | 1.15 | 10 | 40 | 50 |
| 21 | E. C. La Rue | 1.70 | 17 | 74 | 91 |
| 22 | .....do | 1.65 | 10 | 71 | 81 |
| 23 | .....do | 1.65 | 11 | 63 | 74 |
| Mar. 14[a] | .....do | 2.60 | 188 | .......... | 188 |
| 14[b] | .....do | 2.50 | 138 | 50 | 188 |
| 15[a] | .....do | 2.30 | 132 | 57 | 189 |
| 15[b] | .....do | 2.10 | 113 | 57 | 170 |
| 30 | R. S. Hawley | 1.90 | 81 | 46 | 127 |
| Apr. 14 | .....do | 1.95 | 86 | 1 | 87 |
| May 17 | .....do | 2.25 | 111 | 37 | 148 |
| June 7 | .....do | 2.20 | 79 | .......... | 79 |
| 26 | .....do | 1.43 | 4 | 66 | 70 |
| July 6 | .....do | 1.40 | 3 | 61 | 64 |
| 1906. | | | | | |
| Jan. 20 | C. H. Lee | 2.17 | 87 | 37 | 124 |
| Feb. 11 | .....do | 1.51 | 11 | 42 | 53 |
| 11 | .....do | 1.57 | 15.8 | 42 | 58 |
| 11 | .....do | 1.54 | 12.8 | 42 | 55 |
| 12 | .....do | 1.45 | 6.7 | 52 | 59 |
| Mar. 14 | .....do | 3.50 | 351 | 27 | 378 |
| 16 | .....do | 5.40 | 1,410 | 49 | 1,460 |
| 16 | .....do | 5.80 | 1,870 | 49 | 1,920 |
| 17 | .....do | 4.15 | 677 | .......... | 677 |
| 17 | .....do | 3.85 | 597 | .......... | 597 |
| 18 | .....do | 3.70 | 405 | 11 | 416 |
| 23 | M. P. Beeson | 3.05 | 156 | 55 | 211 |
| 25 | .....do | 4.90 | 913 | 35 | 948 |
| 26 | .....do | 6.35 | 2,250 | 34 | 2,280 |
| 26 | .....do | 5.90 | 1,780 | 34 | 1,810 |
| 27 | .....do | 5.25 | 1,200 | 25 | 1,220 |
| Apr. 10 | C. H. Lee | 3.00 | 130 | 68 | 198 |
| 21 | M. P. Beeson | 3.50 | 214 | 72 | 286 |
| May 12 | .....do | 3.60 | 148 | 71 | 219 |
| 12 | .....do | 3.60 | 160 | 71 | 231 |
| June 2 | .....do | 3.50 | 149 | 66 | 215 |
| 28 | .....do | 3.00 | 70 | 71 | 141 |
| Aug. 4 | R. S. Hawley | 2.55 | 13.1 | 72 | 85 |
| Oct. 11 | W. F. Martin | 2.31 | 2.9 | 61 | 64 |
| Dec. 28 | .....do | 3.85 | 276 | 74 | 350 |
| 1907. | | | | | |
| Jan. 10 | W. F. Martin | 3.82 | 284 | 76 | 360 |
| Feb. 27 | .....do | 3.95 | 379 | 76 | 455 |
| Mar. 12 | .....do | 4.1 | 501 | 76 | 577 |
| 26 | .....do | 4.65 | 872 | 72 | 944 |
| Apr. 29 | W. B. Clapp | 3.35 | 184 | 73 | 257 |
| June 12 | W. F. Martin | 3.00 | 110 | 70 | 180 |
| 27 | W. B. Clapp | 2.75 | 79 | 70 | 149 |
| July 30 | W. F. Martin | 2.52 | 59 | 69 | 128 |
| Aug. 22 | .....do | 2.15 | 16 | 69 | 85 |
| Sept. 18 | W. B. Clapp | 1.85 | 2.6 | 66 | 69 |
| 1908. | | | | | |
| Jan. 29 | W. F. Martin | 3.0 | 126 | .......... | 126 |
| Feb. 20 | .....do | 2.64 | 77 | 78 | 155 |
| May 15 | W. B. Clapp | 1.85 | 4 | 68 | 72 |
| 1909. | | | | | |
| Mar. 5 | W. B. Clapp | 2.75 | 49 | 76 | 125 |
| 23 | W. F. Martin | 3.30 | 124 | 76 | 200 |
| May 12 | W. B. Clapp | 3.05 | 83 | 73 | 156 |
| June 18 | .....do | 2.38 | 9 | 76 | 85 |
| July 9 | .....do | 2.20 | 2.8 | 64 | 66.8 |
| Dec. 31 | .....do | 4.75 | 477 | 70 | 547 |
| 1910. | | | | | |
| Feb. 5 | R. E. Haines | 1.55 | 31 | 73 | 104 |
| 24 | J. E. Stewart | 1.40 | 19 | 66 | 85 |
| Apr. 13 | .....do | 1.95 | 67 | 78 | 145 |
| 28 | W. B. Clapp | 1.30 | 11 | 78 | 89 |
| June 7 | .....do | 1.21 | 6.9 | 72 | 79 |
| July 20 | J. E. Stewart | 1.92 | 67 | 0 | 67 |
| Sept. 14 | W. B. Clapp | 1.28 | 6.4 | 58 | 64 |

[a] a. m. [b] p. m.

*Discharge measurements of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., in 1896–1912*—Continued.

| Date. | Hydrographer. | Gage height of river. | Discharge. River. | Discharge. Canal. | Discharge. Total for river. |
|---|---|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| 1911. | | | | | |
| Feb. 17 | W. V. Hardy | 2.28 | 104 | 72 | [illegible] |
| 21 | ....do | 2.01 | 76 | 72 | [illegible] |
| Apr. 8 | ....do | 3.68 | 162 | 71 | [illegible] |
| 22 | ....do | 3.43 | 96 | 71 | [illegible] |
| May 25 | ....do | 3.15 | 49 | 74 | [illegible] |
| June 26 | H. D. McGlashan | 2.94 | 21 | 77 | [illegible] |
| Aug. 29 | F. C. Ebert | 2.53 | 1.7 | 66 | [illegible] |
| 1912. | | | | | |
| Jan. 11 | F. C. Ebert | 2.50 | 1.4 | ........ | ........ |
| Mar. 20 | ....do | 2.71 | 9.3 | ........ | ........ |
| May 27 | ....do | 2.49 | 2.2 | ........ | ........ |

NOTE.—Gage heights in the above table refer to the discharge of the river alone and not to the combined discharge.

*Daily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1896–19[illegible].*

| Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1896. | | | | 1896. | | | | 1896. | | | |
| 1 | 1.21 | 1.35 | 1.33 | 11 | 1.29 | 1.29 | 0.92 | 21 | 1.33 | 1.[illegible] | [illegible] |
| 2 | 1.21 | 1.27 | 1.35 | 12 | 1.36 | 1.27 | .94 | 22 | 1.38 | 1.[illegible] | |
| 3 | 1.25 | 1.33 | 1.33 | 13 | 1.38 | 1.29 | 1.12 | 23 | 1.38 | 1.[illegible] | [illegible] |
| 4 | 1.25 | 1.29 | 1.21 | 14 | 1.21 | 1.27 | 1.25 | 24 | 1.38 | 1.[illegible] | |
| 5 | 1.25 | 1.31 | 1.21 | 15 | 1.29 | 1.27 | 1.25 | 25 | 1.29 | 1.06 | [illegible] |
| 6 | 1.25 | 1.27 | 1.04 | 16 | 1.25 | 1.27 | 1.33 | 26 | 1.17 | 1.[illegible] | [illegible] |
| 7 | 1.17 | 1.39 | 1.29 | 17 | 1.33 | 1.10 | 1.37 | 27 | 1.25 | 1.[illegible] | [illegible] |
| 8 | 1.17 | 1.27 | 1.29 | 18 | 1.33 | 1.08 | 1.36 | 28 | 1.25 | 1.[illegible] | [illegible] |
| 9 | 1.29 | 1.27 | 1.27 | 19 | 1.33 | 1.33 | 1.33 | 29 | 1.38 | 1.33 | [illegible] |
| 10 | 1.31 | 1.27 | 1.27 | 20 | 1.33 | 1.17 | 1.29 | 30 | 1.31 | 1.33 | [illegible] |
| | | | | | | | | 31 | 1.35 | 1.[illegible] | ... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1896-97. | | | | | | | | | | | | |
| 1 | 1.29 | 1.00 | 1.00 | 1.25 | 2.70 | 1.60 | 1.60 | 1.50 | 1.10 | 1.15 | 1.30 | |
| 2 | 1.38 | 1.00 | 1.00 | 1.23 | 2.10 | 1.60 | 1.60 | 1.50 | 1.05 | 1.05 | 1.35 | |
| 3 | 1.27 | 1.00 | 1.02 | 1.00 | 1.85 | 1.55 | 1.55 | 1.50 | 1.10 | 1.10 | 1.[illegible] | ... |
| 4 | 1.25 | 1.00 | 1.02 | 1.00 | 1.85 | 1.50 | 1.60 | 1.50 | 1.15 | 1.15 | 1.[illegible] | |
| 5 | 1.14 | 1.00 | 1.02 | 1.00 | 1.65 | 1.45 | 1.60 | 1.50 | 1.10 | 1.10 | 1.[illegible] | |
| 6 | 1.12 | 1.00 | 1.02 | .96 | 1.65 | 1.60 | 1.65 | 1.50 | 1.05 | 1.10 | 1.[illegible] | ... |
| 7 | 1.21 | .96 | 1.02 | .92 | 1.65 | 2.50 | 1.70 | 1.50 | 1.05 | 1.10 | 1.[illegible] | |
| 8 | 1.21 | .96 | 1.02 | .92 | 1.80 | 1.65 | 1.70 | 1.45 | 1.05 | 1.15 | 1.[illegible] | |
| 9 | 1.17 | .96 | 1.02 | .93 | 1.85 | 1.65 | 1.65 | 1.40 | 1.05 | 1.20 | 1.[illegible] | |
| 10 | 1.25 | .96 | 1.02 | .92 | 1.65 | 1.60 | 1.65 | 1.30 | 1.10 | 1.15 | 1.[illegible] | |
| 11 | 1.29 | .96 | 1.02 | 1.12 | 1.50 | 1.50 | 1.73 | 1.30 | 1.10 | 1.20 | 1.35 | |
| 12 | 1.25 | .98 | 1.02 | 1.10 | 1.50 | 1.50 | 1.75 | 1.30 | 1.10 | 1.20 | 1.40 | |
| 13 | 1.17 | .96 | 1.02 | 1.16 | 1.50 | 1.50 | 1.80 | 1.30 | 1.15 | 1.15 | 1.40 | |
| 14 | 1.17 | .96 | 1.02 | 1.21 | 1.40 | 1.40 | 1.80 | 1.30 | 1.15 | 1.25 | 1.40 | |
| 15 | 1.18 | .96 | 1.02 | 1.37 | 1.40 | 1.50 | 1.75 | 1.25 | 1.20 | 1.15 | 1.40 | ... |
| 16 | 1.08 | .96 | 1.04 | 1.21 | 1.35 | 1.60 | 1.73 | 1.25 | 1.20 | 1.30 | 1.30 | |
| 17 | 1.17 | .96 | 1.04 | 1.40 | 1.40 | 1.50 | 1.75 | 1.20 | 1.20 | 1.20 | 1.30 | |
| 18 | 1.19 | .96 | 1.04 | 1.40 | 2.90 | 1.45 | 1.80 | 1.15 | 1.20 | 1.20 | 1.30 | |
| 19 | 1.19 | .96 | 1.04 | 1.35 | 2.10 | 1.40 | 1.80 | 1.10 | 1.20 | 1.20 | 1.30 | |
| 20 | 1.19 | .96 | 1.04 | 1.35 | 2.05 | 1.60 | 1.80 | 1.10 | 1.20 | 1.16 | 1.35 | |
| 21 | 1.06 | .98 | 1.04 | 1.40 | 1.70 | 1.46 | 1.70 | 1.10 | 1.20 | 1.10 | 1.45 | |
| 22 | 1.12 | .98 | 1.04 | 1.40 | 1.70 | 1.40 | 1.65 | 1.10 | 1.20 | 1.15 | 1.[illegible] | |
| 23 | 1.11 | 1.00 | 1.02 | 1.45 | 1.65 | 1.40 | 1.60 | 1.10 | 1.15 | 1.15 | 1.[illegible] | |
| 24 | 1.08 | 1.00 | 1.02 | 1.45 | 1.60 | 1.30 | 1.60 | 1.15 | 1.15 | 1.20 | 1.[illegible] | |
| 25 | 1.08 | 1.19 | 1.02 | 1.46 | 1.60 | 1.35 | 1.60 | 1.10 | 1.15 | 1.30 | 1.[illegible] | .. |

*Daily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1896-1903*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1896-97. | | | | | | | | | | | | |
| 6 | 1.06 | 1.04 | 1.00 | 1.45 | 1.65 | 1.35 | 1.60 | 1.05 | 1.20 | 1.25 | 1.35 | ...... |
| 7 | 1.75 | 1.04 | 1.00 | 1.45 | 1.55 | 1.40 | 1.55 | 1.00 | 1.20 | 1.35 | 1.30 | ...... |
| 8 | 1.17 | 1.02 | 1.08 | 1.45 | 1.55 | 1.75 | 1.60 | 1.00 | 1.20 | 1.30 | 1.30 | ...... |
| 9 | 1.17 | 1.02 | 1.08 | 1.45 | ...... | 1.60 | 1.55 | 1.00 | 1.10 | 1.30 | 1.35 | ...... |
| 0 | 1.17 | 1.02 | 1.06 | 1.50 | ...... | 1.55 | 1.50 | .95 | 1.15 | 1.30 | 1.35 | ...... |
| 1 | 1.17 | ...... | 1.02 | 1.45 | ...... | 1.60 | ...... | .95 | ...... | 1.30 | 1.35 | ...... |
| 1897-98. | | | | | | | | | | | | |
| 1 | 1.30 | 1.15 | 1.10 | 1.00 | 1.05 | 1.00 | 1.02 | 1.10 | 1.17 | 1.10 | 1.10 | 1.05 |
| 2 | 1.17 | 1.15 | 1.05 | 1.00 | 1.05 | 1.00 | 1.02 | 1.10 | 1.15 | 1.12 | 1.10 | 1.05 |
| 3 | 1.15 | 1.15 | 1.05 | 1.00 | 1.05 | .97 | 1.00 | .90 | 1.15 | 1.13 | 1.10 | 1.05 |
| 4 | 1.15 | 1.15 | 1.05 | 1.00 | 1.05 | .95 | 1.00 | .90 | 1.05 | 1.10 | 1.10 | 1.05 |
| 5 | 1.20 | 1.15 | 1.05 | 1.00 | 1.05 | .95 | 1.00 | .85 | 1.05 | 1.10 | 1.07 | 1.05 |
| 6 | 1.25 | 1.15 | 1.05 | 1.00 | 1.35 | 1.00 | 1.00 | .85 | 1.15 | 1.10 | 1.05 | .90 |
| 7 | 1.23 | 1.15 | 1.05 | 1.00 | 1.35 | 1.05 | 1.00 | .85 | 1.15 | 1.07 | 1.00 | .90 |
| 8 | 1.30 | 1.15 | 1.05 | 1.00 | 1.25 | 1.05 | 1.00 | .85 | 1.10 | 1.07 | 1.10 | .92 |
| 9 | 1.23 | 1.20 | 1.05 | 1.00 | 1.20 | 1.05 | 1.00 | .95 | 1.10 | 1.07 | 1.20 | 1.10 |
| 0 | 1.12 | 1.20 | 1.05 | 1.45 | 1.15 | 1.05 | 1.02 | .95 | 1.15 | 1.15 | 1.25 | 1.15 |
| 1 | 1.20 | 1.30 | 1.05 | 1.15 | 1.15 | 1.03 | 1.00 | 1.40 | 1.15 | 1.15 | 1.25 | 1.15 |
| 2 | 1.20 | 1.30 | 1.05 | 1.15 | 1.10 | 1.07 | .91 | 1.40 | 1.10 | 1.22 | 1.22 | 1.15 |
| 3 | 1.23 | 1.30 | 1.05 | 1.15 | 1.07 | 1.10 | .91 | 1.30 | 1.10 | 1.20 | 1.20 | 1.12 |
| 4 | 2.60 | 1.27 | 1.05 | 1.15 | 1.05 | 1.00 | 1.00 | 1.30 | 1.10 | 1.15 | 1.17 | 1.10 |
| 5 | 1.25 | 1.25 | 1.15 | 1.10 | 1.05 | 1.03 | 1.02 | 1.60 | 1.05 | 1.15 | 1.15 | 1.05 |
| 6 | 1.15 | 1.25 | 1.05 | 1.10 | 1.05 | 1.05 | 1.02 | 1.40 | 1.05 | 1.15 | 1.12 | 1.00 |
| 7 | 1.10 | 1.20 | .95 | 1.10 | 1.05 | 1.00 | 1.02 | 1.30 | 1.05 | 1.07 | 1.15 | .95 |
| 8 | .90 | 1.20 | 1.00 | 1.10 | 1.10 | .90 | .97 | 1.30 | 1.05 | 1.00 | 1.15 | 1.03 |
| 9 | .90 | 1.20 | 1.00 | 1.10 | 1.05 | .90 | .97 | 1.25 | 1.05 | 1.00 | 1.15 | 1.07 |
| 0 | .90 | 1.20 | .90 | 1.10 | 1.05 | .87 | .95 | 1.25 | 1.05 | 1.10 | 1.15 | 1.00 |
| 1 | .90 | 1.17 | .80 | 1.10 | 1.05 | 1.00 | .95 | 1.25 | 1.22 | 1.12 | 1.05 | 1.05 |
| 2 | .90 | 1.15 | .80 | 1.15 | 1.00 | .82 | .92 | 1.25 | 1.25 | 1.12 | 1.05 | 1.05 |
| 3 | .90 | 1.15 | .90 | 1.25 | 1.00 | .82 | .92 | 1.20 | 1.25 | 1.12 | 1.05 | 1.05 |
| 4 | .95 | 1.15 | .90 | 1.10 | 1.00 | .85 | .92 | 1.20 | 1.25 | 1.12 | 1.00 | 1.05 |
| 5 | .95 | 1.25 | 1.00 | 1.00 | 1.00 | .90 | .92 | 1.20 | 1.25 | 1.10 | 1.10 | 1.05 |
| 6 | 1.05 | 1.15 | 1.00 | 1.00 | 1.00 | 1.05 | .92 | 1.20 | 1.25 | 1.05 | 1.00 | .92 |
| 7 | 1.05 | 1.15 | 1.00 | 1.00 | 1.00 | .95 | .90 | 1.25 | 1.12 | 1.10 | 1.10 | .95 |
| 8 | 1.10 | 1.15 | 1.00 | 1.05 | 1.00 | 1.00 | .90 | 1.25 | 1.12 | 1.10 | 1.00 | 1.00 |
| 9 | 1.25 | 1.15 | 1.00 | 1.05 | ...... | 1.00 | .90 | 1.25 | 1.10 | 1.10 | 1.05 | 1.05 |
| 0 | 1.25 | 1.15 | 1.00 | 1.05 | ...... | 1.00 | .90 | 1.25 | 1.10 | 1.10 | 1.05 | 1.05 |
| 1 | 1.25 | ...... | 1.00 | 1.05 | ...... | 1.02 | ...... | 1.20 | ...... | 1.10 | 1.05 | ...... |
| 1898-99. | | | | | | | | | | | | |
| 1 | 1.05 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.30 | 2.35 | 2.65 | 2.30 | 2.20 | 1.90 |
| 2 | 1.00 | ...... | 2.10 | 2.10 | 2.25 | 2.20 | 2.20 | 2.30 | 2.35 | 2.30 | 2.20 | 1.90 |
| 3 | .90 | ...... | 2.10 | 2.10 | 2.25 | 2.20 | 2.15 | 2.30 | 2.40 | 2.30 | 2.20 | 1.90 |
| 4 | .90 | ...... | 2.10 | 2.10 | 2.25 | 2.20 | 2.20 | 2.35 | 2.35 | 2.30 | 2.00 | 1.90 |
| 5 | .90 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.40 | 2.30 | 2.30 | 2.00 | 1.90 |
| 6 | .85 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.45 | 2.30 | 2.35 | 2.00 | 1.90 |
| 7 | .80 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.45 | 2.30 | 2.35 | 1.90 | 1.90 |
| 8 | .80 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.35 | 2.30 | 2.35 | 1.90 | 1.90 |
| 9 | 1.00 | ...... | 2.20 | 2.10 | 2.20 | 2.20 | 2.15 | 2.25 | 2.30 | 2.35 | 1.90 | 1.90 |
| 0 | 1.00 | 2.10 | 2.10 | 2.10 | 2.20 | 2.20 | 2.15 | 2.25 | 2.25 | 2.37 | 1.90 | 1.90 |
| 1 | .97 | 2.10 | 2.10 | 2.30 | 2.20 | 2.20 | 2.15 | 2.30 | 2.25 | 2.37 | 1.90 | 1.90 |
| 2 | .96 | 2.10 | 2.10 | 2.30 | 2.20 | 2.20 | 2.15 | 2.30 | 2.25 | 2.35 | 1.90 | 1.90 |
| 3 | .95 | 2.10 | 2.10 | 2.30 | 2.20 | 2.15 | 2.15 | 2.35 | 2.30 | 2.35 | 1.90 | 1.90 |
| 4 | .95 | 2.10 | 2.10 | 2.30 | 2.20 | 2.15 | 2.10 | 2.35 | 2.30 | 2.35 | 1.90 | 1.90 |
| 5 | .95 | 2.10 | 2.10 | 2.20 | 2.20 | 2.15 | 2.10 | 2.30 | 2.30 | 2.30 | 1.90 | 1.90 |
| 6 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.20 | 2.40 | 2.30 | 2.25 | 2.30 | 1.90 | 1.90 |
| 7 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.25 | 2.35 | 2.30 | 2.30 | 2.30 | 1.90 | 1.90 |
| 8 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.35 | 2.35 | 2.25 | 2.30 | 2.30 | 1.90 | 1.80 |
| 9 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.30 | 2.35 | 2.25 | 2.20 | 2.30 | 1.90 | 1.80 |
| 0 | ...... | 2.30 | 2.10 | 2.20 | 2.20 | 2.55 | 2.30 | 2.25 | 2.30 | 2.25 | 1.87 | 1.80 |
| 1 | ...... | 2.20 | 2.10 | 2.20 | 2.20 | 2.55 | 2.30 | 2.30 | 2.30 | 2.20 | 1.87 | 1.80 |
| 2 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.30 | 2.30 | 2.20 | 2.25 | 2.25 | 1.87 | 1.80 |
| 3 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.30 | 2.30 | 2.25 | 2.25 | 2.25 | 1.87 | 1.85 |
| 4 | ...... | 2.10 | 2.10 | 2.20 | 2.30 | 2.35 | 2.35 | 2.30 | 2.25 | 2.25 | 1.87 | 1.85 |
| 5 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.35 | 2.40 | 2.30 | 2.30 | 2.50 | 1.90 | 1.85 |
| 6 | ...... | 2.10 | 2.10 | 2.20 | 2.25 | 2.35 | 2.40 | 2.30 | 2.35 | 2.50 | 1.90 | 1.90 |
| 7 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.40 | 2.40 | 2.25 | 2.30 | 2.30 | 1.90 | 1.90 |
| 8 | ...... | 2.10 | 2.10 | 2.20 | 2.20 | 2.35 | 2.40 | 2.30 | 2.30 | 2.27 | 1.90 | 1.90 |
| 9 | ...... | 3.10 | 2.10 | 2.20 | ...... | 2.35 | 2.40 | 2.30 | 2.28 | 2.25 | 1.90 | 1.90 |
| 0 | ...... | 2.10 | 2.10 | 2.20 | ...... | 2.35 | 2.35 | 2.30 | 2.28 | 2.20 | 1.90 | 1.90 |
| 1 | ...... | ...... | 2.10 | 2.20 | ...... | 2.30 | ...... | 2.30 | ...... | 2.20 | 1.90 | ...... |

[illegible] gage height, [illegible] near [illegible], Cal., for 1905–1914—Con.

| Day. | | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1909–? | | | | | | | | | | | | |
| 11 | [illegible] | [illegible] | 2.3 | 3.6 | 3.1 | 4.2 | 4.3 | 3.4 | 3.0 | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | 3.7 | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 2.5 | [illegible] | 2.3 | [illegible] | [illegible] | [illegible] | 4.3 | 3.2 | 3.0 | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | 2.3 | 2.4 | 3.3 | [illegible] | [illegible] | 4.3 | 3.0 | 3.0 | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | 2.4 | 3.5 | [illegible] | [illegible] | [illegible] | 3.0 | 2.9 | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | 2.3 | 2.2 | 4.0 | [illegible] | [illegible] | [illegible] | 3.0 | 2.8 | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | 2.3 | 2.2 | [illegible] | 2.9 | [illegible] | [illegible] | 3.6 | 2.8 | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | 2.3 | 2.6 | 3.6 | 2.3 | 4.4 | 4.3 | 3.6 | 2.5 | [illegible] | 2.0 | [illegible] |

*aily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1905-1912.*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| | 2.3 | 2.3 | 2.0 | 3.6 | 3.6 | 6.0 | 4.2 | 3.6 | 2.8 | 2.6 | 2.1 | 1.9 |
| | 2.3 | 2.3 | 2.0 | 3.6 | 4.4 | 4.9 | 4.1 | 3.2 | 2.8 | 2.5 | 2.1 | 1.9 |
| | 2.3 | 2.3 | 2.0 | 3.6 | 4.4 | 4.8 | 3.7 | 3.2 | 2.8 | 2.5 | 2.1 | 1.9 |
| | 2.3 | 2.3 | 2.0 | 3.6 | 4.1 | 4.6 | 3.6 | 3.2 | 2.8 | 2.5 | 2.1 | 1.9 |
| | 2.3 | 2.3 | 2.0 | 3.0 | 4.0 | 4.8 | 3.6 | 3.1 | 2.8 | 2.5 | 2.1 | 1.9 |
| | 2.3 | 2.3 | 2.0 | 2.9 | 4.0 | 4.7 | 3.6 | 3.1 | 2.8 | 2.5 | 2.1 | 1.9 |
| | 2.3 | 2.3 | 3.2 | 2.9 | 4.0 | 4.7 | 3.7 | 3.2 | 2.8 | 2.5 | 2.1 | 1.9 |
| | 2.3 | 2.3 | 3.5 | 2.9 | 3.4 | 4.5 | 3.7 | 3.1 | 2.7 | 2.5 | 2.1 | 1.9 |
| | 2.3 | 2.3 | 3.5 | 2.9 | ...... | 4.4 | 3.4 | 3.1 | 2.7 | 2.4 | 2.1 | 1.9 |
| | 2.3 | 2.3 | 2.1 | 3.4 | ...... | 4.3 | 3.7 | 3.0 | 2.8 | 2.4 | 2.1 | 1.9 |
| | 2.3 | ...... | 2.8 | 3.0 | ...... | 4.2 | ...... | 3.0 | ...... | 2.4 | 2.1 | ...... |
| 1907-8. | | | | | | | | | | | | |
| | 1.9 | 2.4 | 1.9 | 1.7 | 2.0 | 3.0 | 2.7 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.4 | 1.9 | 1.7 | 2.9 | 2.9 | 2.6 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.4 | 1.8 | 1.7 | 2.9 | 2.9 | 2.4 | 2.4 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.7 | 1.8 | 1.7 | 3.6 | 3.0 | 2.2 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.0 | 2.7 | 1.8 | 1.7 | 2.8 | 3.0 | 2.1 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.0 | 2.7 | 1.8 | 1.7 | 2.5 | 2.5 | 2.0 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.3 | 1.8 | 1.7 | 2.3 | 2.4 | 2.0 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.0 | 1.8 | 1.7 | 2.2 | 2.4 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 1.9 | 1.8 | 1.7 | 2.1 | 2.1 | 1.9 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.3 | 1.8 | 1.7 | 2.2 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.7 | 1.8 | 1.7 | 2.2 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.7 | 1.8 | 1.7 | 2.2 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.7 | 1.8 | 1.7 | 2.1 | 2.0 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.7 | 1.8 | 1.7 | 2.0 | 2.0 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.7 | 1.8 | 1.7 | 2.7 | 2.2 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.2 | 2.7 | 1.8 | 1.7 | 2.6 | 2.2 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.1 | 2.7 | 1.8 | 1.7 | 2.6 | 2.2 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.1 | 2.7 | 1.7 | 1.7 | 2.6 | 2.9 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.1 | 2.6 | 1.7 | 1.7 | 2.6 | 3.0 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.0 | 2.6 | 1.7 | 1.7 | 2.6 | 3.0 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.0 | 2.6 | 1.7 | 1.7 | 2.6 | 3.0 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 1.9 | 2.6 | 1.7 | 1.7 | 2.6 | 3.0 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.0 | 2.5 | 1.7 | 1.7 | 2.6 | 3.0 | 2.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.5 | 2.5 | 1.7 | 3.0 | 2.6 | 2.9 | 2.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.2 | 1.9 | 1.7 | 3.4 | 2.6 | 2.9 | 2.3 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.1 | 1.9 | 1.7 | 2.8 | 2.6 | 2.3 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.1 | 1.9 | 1.7 | 2.4 | 2.7 | 2.4 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.4 | 1.9 | 1.7 | 3.0 | 2.7 | 2.4 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.4 | 1.9 | 1.7 | 3.2 | 3.3 | 2.6 | 2.2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.4 | 1.9 | 1.7 | 3.0 | ...... | 2.7 | 2.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| | 2.4 | ...... | 1.7 | 3.0 | ...... | 2.7 | ...... | 1.8 | ...... | 1.8 | 1.8 | ...... |
| 1908-9. | | | | | | | | | | | | |
| | 1.8 | 1.8 | 1.8 | 1.8 | 2.3 | 2.9 | 3.3 | 3.4 | 2.5 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 2.2 | 2.9 | 3.3 | 3.5 | 2.5 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 2.1 | 2.9 | 3.7 | 3.4 | 2.5 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.0 | 2.8 | 3.7 | 3.3 | 2.5 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 2.6 | 2.8 | 3.7 | 3.3 | 2.6 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 2.5 | 2.8 | 3.7 | 3.3 | 3.4 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 4.5 | 2.8 | 3.3 | 3.4 | 3.4 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 4.1 | 2.8 | 2.9 | 3.4 | 3.4 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.5 | 2.7 | 2.9 | 3.0 | 2.7 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.3 | 2.7 | 2.9 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 2.7 | 2.9 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.8 | 2.6 | 2.9 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 4.6 | 2.6 | 2.8 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 2.3 | 4.0 | 2.5 | 2.9 | 3.1 | 2.7 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.9 | 2.5 | 3.0 | 3.0 | 2.7 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.6 | 2.5 | 3.1 | 3.0 | 2.6 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.5 | 2.5 | 3.1 | 2.9 | 2.4 | 2.2 | 2.3 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 3.1 | 3.3 | 2.8 | 2.3 | 2.2 | 2.5 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 3.1 | 3.3 | 2.8 | 2.5 | 2.2 | 2.3 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 3.1 | 3.3 | 2.8 | 2.4 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 1.8 | 3.4 | 3.2 | 3.1 | 2.7 | 2.3 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 5.5 | 3.2 | 3.2 | 3.4 | 2.7 | 2.2 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 3.6 | 3.2 | 3.3 | 3.4 | 2.7 | 2.2 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 3.1 | 3.2 | 3.7 | 3.4 | 2.7 | 2.2 | 2.2 | 2.2 | 2.2 |
| | 1.8 | 1.8 | 1.8 | 2.8 | 3.1 | 3.7 | 3.4 | 2.9 | 2.2 | 2.2 | 2.2 | 2.2 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 3.0 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 3.0 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 3.0 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.4 | 3.1 | 3.0 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 2.9 | 3.5 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 2.9 | 3.0 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 2.9 | 2.8 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 2.9 | 2.5 | 2.5 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.1 | 2.9 | 2.5 | 2.5 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .... | 3.0 | ....... | 2.5 | 2.5 |

*Daily gage height, in feet, of Santa Ana River near Mentone, Cal., for 1905–1912*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 2.6 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.5 |
| 2 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.5 |
| 3 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.4 |
| 4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.7 | 2.4 |
| 5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.7 | 2.4 |
| 6 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 4.0 | 2.5 | 2.7 | 2.4 |
| 7 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.1 | 2.5 | 2.7 | 2.4 |
| 8 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.5 | 2.7 | 2.4 |
| 9 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.8 | 2.4 |
| 10 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.9 | 2.7 | 2.8 | 2.4 |
| 11 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.3 | 3.3 | 2.8 | 2.4 |
| 12 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.9 | 3.1 | 2.8 | 2.4 |
| 13 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.2 | 3.2 | 2.8 | 2.4 |
| 14 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 3.2 | 2.8 | 2.4 |
| 15 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 3.2 | 2.8 | 2.4 |
| 16 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 3.2 | 2.8 | 2.4 |
| 17 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.4 | 3.2 | 2.7 | 2.4 |
| 18 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.7 | 3.1 | 2.7 | 2.4 |
| 19 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.1 | 2.7 | 2.4 |
| 20 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.0 | 2.6 | 2.4 |
| 21 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.9 | 2.6 | 2.4 |
| 22 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.6 | 2.4 |
| 23 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.6 | 2.4 |
| 24 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.5 | 2.4 |
| 25 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.5 | 2.4 |
| 26 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 2.5 | 2.4 |
| 27 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.9 | 2.5 | 2.4 |
| 28 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.9 | 2.5 | 2.4 |
| 29 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.9 | 2.5 | 2.4 |
| 30 | 2.5 | 2.5 | 2.5 | 2.5 | ........ | 2.7 | 2.8 | 2.5 | 2.4 |
| 31 | 2.5 | ........ | 2.5 | 2.5 | ........ | 2.5 | ........ | 2.5 | ........ |

NOTE.—Datum of the gage lowered on June 30, 1903. Gage washed out Dec. 31, 1909, and new gage installed Jan. 23, 1910. No gage heights published for part of 1903 and 1904, as the determination of the discharge was made over weirs.

*Rating tables for Santa Ana River near Mentone, Cal.*

**July 1, 1896, to May 31, 1897.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.90 | 25 | 1.50 | 101 | 2.10 | 300 | 2.60 | 500 |
| 1.00 | 33 | 1.60 | 126 | 2.20 | 340 | 2.70 | 540 |
| 1.10 | 41 | 1.70 | 153 | 2.30 | 380 | 2.80 | 580 |
| 1.20 | 52 | 1.80 | 186 | 2.40 | 420 | 2.90 | 620 |
| 1.30 | 64 | 1.90 | 221 | 2.50 | 460 | 3.00 | 660 |
| 1.40 | 81 | 2.00 | 260 | | | | |

**June 1 to July 31, 1897.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.00 | 55 | 1.20 | 67 | 1.40 | 92 | 1.60 | 129 |
| 1.10 | 60 | 1.30 | 78 | 1.50 | 110 | 1.70 | 151 |

**August 1 to December 31, 1897.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.80 | 23 | 1.00 | 26 | 1.20 | 38 | 1.40 | 70 |
| .90 | 24 | 1.10 | 30 | 1.30 | 52 | 1.50 | 90 |

[illegible]

[illegible]

*Rating tables for Santa Ana River near Mentone, Cal.*—Continued.

**April 1, 1904, to February 17, 1905.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.80 | 1 | 1.40 | 23 | 2.00 | 80 | 2.60 | 170 |
| .90 | 2 | 1.50 | 29 | 2.10 | 93 | 2.70 | 186 |
| 1.00 | 5 | 1.60 | 37 | 2.20 | 106 | 2.80 | 202 |
| 1.10 | 8 | 1.70 | 47 | 2.30 | 122 | 2.90 | 218 |
| 1.20 | 12 | 1.80 | 57 | 2.40 | 138 | 3.00 | 234 |
| 1.30 | 17 | 1.90 | 68 | 2.50 | 154 | | |

**February 18 to March 12 and June 1 to December 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.30 | 1 | 2.00 | 48 | 2.70 | 164 | 3.40 | 290 |
| 1.40 | 3 | 2.10 | 62 | 2.80 | 182 | 3.50 | 308 |
| 1.50 | 6 | 2.20 | 78 | 2.90 | 200 | 3.60 | 326 |
| 1.60 | 11 | 2.30 | 94 | 3.00 | 218 | 3.70 | 344 |
| 1.70 | 17 | 2.40 | 110 | 3.10 | 236 | 3.80 | 362 |
| 1.80 | 25 | 2.50 | 128 | 3.20 | 254 | 3.90 | 380 |
| 1.90 | 35 | 2.60 | 146 | 3.30 | 272 | | |

**March 13 to May 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.80 | 1 | 1.60 | 46 | 2.40 | 151 | 3.20 | 287 |
| .90 | 2 | 1.70 | 56 | 2.50 | 168 | 3.30 | 304 |
| 1.00 | 4 | 1.80 | 68 | 2.60 | 185 | 3.40 | 321 |
| 1.10 | 8 | 1.90 | 80 | 2.70 | 202 | 3.50 | 338 |
| 1.20 | 13 | 2.00 | 92 | 2.80 | 219 | 3.60 | 355 |
| 1.30 | 20 | 2.10 | 106 | 2.90 | 236 | 3.70 | 362 |
| 1.40 | 28 | 2.20 | 120 | 3.00 | 253 | 3.80 | 379 |
| 1.50 | 36 | 2.30 | 135 | 3.10 | 270 | | |

Jan. 1 to Dec. 31, 1906, indirect method for shifting channels.

**January 1 to April 16, 1907.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.50 | 10 | 3.40 | 155 | 4.30 | 625 | 5.20 | 1,300 |
| 2.60 | 18 | 3.50 | 181 | 4.40 | 700 | 5.30 | 1,375 |
| 2.70 | 27 | 3.60 | 210 | 4.50 | 775 | 5.40 | 1,450 |
| 2.80 | 38 | 3.70 | 241 | 4.60 | 850 | 5.50 | 1,525 |
| 2.90 | 52 | 3.80 | 275 | 4.70 | 925 | 5.60 | 1,600 |
| 3.00 | 69 | 3.90 | 330 | 4.80 | 1,000 | 5.70 | 1,675 |
| 3.10 | 88 | 4.00 | 400 | 4.90 | 1,075 | 5.80 | 1,750 |
| 3.20 | 108 | 4.10 | 475 | 5.00 | 1,150 | 5.90 | 1,825 |
| 3.30 | 131 | 4.20 | 550 | 5.10 | 1,225 | 6.00 | 1,900 |

NOTE.—Table applicable only to open channel. It is based on four discharge measurements made during January to March, 1907, and is well defined between gage heights 3.8 feet and 4.7 feet.

**April 17 to December 31, 1907.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.70 | 1 | 2.40 | 40 | 3.10 | 132 | 3.80 | 314 |
| 1.80 | 2 | 2.50 | 50 | 3.20 | 150 | 3.90 | 360 |
| 1.90 | 4 | 2.60 | 60 | 3.30 | 170 | 4.00 | 415 |
| 2.00 | 9 | 2.70 | 72 | 3.40 | 192 | 4.10 | 475 |
| 2.10 | 15 | 2.80 | 85 | 3.50 | 217 | 4.20 | 550 |
| 2.20 | 22 | 2.90 | 100 | 3.60 | 243 | 4.30 | 625 |
| 2.30 | 31 | 3.00 | 116 | 3.70 | 276 | | |

NOTE.—Table applicable only to open channel. It is based on five discharge measurements made during April to August, 1907, and is well defined between gage heights 2.0 feet and 3.5 feet.

**January 1 to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.70 | 0 | 2.30 | 33 | 2.90 | 105 | 3.50 | 217 |
| 1.80 | 2 | 2.40 | 43 | 3.00 | 120 | 3.60 | 240 |
| 1.90 | 5 | 2.50 | 54 | 3.10 | 137 | 3.70 | 264 |
| 2.00 | 9 | 2.60 | 66 | 3.20 | 155 | 3.80 | 289 |
| 2.10 | 16 | 2.70 | 78 | 3.30 | 174 | 3.90 | 315 |
| 2.20 | 24 | 2.80 | 91 | 3.40 | 195 | 4.00 | 342 |

NOTE.—Table applicable only to open channel. It is based on eight discharge measurements made during 1907 and 1908 and is well defined between gage heights 1.8 feet and 4 feet.

*ily discharge, in second-feet, of Santa Ana River near Mentone, Cal., for 1901–1904 and 1910–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902–3. | | | | | | | | | | | | |
| | 31 | 43 | 23 | 20 | 102 | 36 | 4,910 | 112 | 79 | 47.5 | 56.5 | 52.5 |
| | 30 | 23 | 23 | 20 | 42 | 36 | 1,060 | 112 | 79 | 46.5 | 56.0 | 44.5 |
| | 31 | 23 | 23 | 20 | 42 | 36 | 565 | 112 | 79 | 51.5 | 56.5 | 49.0 |
| | 33 | 22 | 22 | 20 | 36 | 63 | 345 | 106 | 79 | 47.5 | 55.5 | 47.5 |
| | 37 | 20 | 22 | 16 | 36 | 125 | 345 | 100 | 79 | 50.0 | 51.5 | 46.0 |
| | 36 | 19 | 22 | 16 | 36 | 63 | 200 | 100 | 79 | 48.0 | 51.0 | 49.0 |
| | 34 | 20 | 22 | 16 | 42 | 48 | 179 | 95 | 76 | 48.0 | 50.5 | 50.5 |
| | 37 | 20 | 21 | 15 | 42 | 48 | 169 | 90 | 76 | 44.5 | 50.5 | 51.0 |
| | 42 | 20 | 21 | 15 | 48 | 48 | 142 | 90 | 76 | 50.0 | 52.5 | 50.0 |
| | 43 | 20 | 21 | 15 | 48 | 42 | 112 | 90 | 73 | 50.0 | 52.0 | 55.0 |
| | 44 | 31 | 27 | 15 | 55 | 36 | 112 | 90 | 73 | 54.5 | 51.0 | 55.5 |
| | 42 | 26 | 21 | 15 | 55 | 36 | 112 | 90 | 70 | 51.5 | 50.0 | 56.5 |
| | 36 | 23 | 21 | 10 | 55 | 38 | 112 | 90 | 70 | 50.0 | 50.0 | 61.0 |
| | 36 | 23 | 22 | 10 | 55 | 38 | 106 | 90 | 65 | 50.0 | 56.5 | 59.0 |
| | 35 | 23 | 21 | 10 | 55 | 42 | 106 | 90 | 62 | 47.5 | 56.5 | 59.0 |
| | 33 | 23 | 22 | 10 | 42 | 42 | 126 | 90 | 60 | 48.0 | 54.0 | 57.5 |
| | 32 | 19 | 19 | 10 | 42 | 42 | 179 | 90 | 58 | 49.5 | 55.0 | 54.5 |
| | 32 | 20 | 21 | 10 | 36 | 42 | 160 | 90 | 56 | 52.5 | 55.5 | 51.0 |
| | 34 | 31 | 24 | 10 | 36 | 42 | 142 | 90 | 56 | 54.0 | 57.5 | 49.5 |
| | 36 | 25 | 22 | 10 | 36 | 36 | 142 | 90 | 56 | 54.0 | 57.5 | 48.0 |
| | 40 | 23 | 24 | 10 | 42 | 36 | 142 | 86 | 56 | 52.0 | 54.5 | 47.0 |
| | 39 | 24 | 24 | 10 | 42 | 36 | 126 | 112 | 56 | 50.5 | 56.0 | 47.5 |
| | 49 | 24 | 26 | 15 | 42 | 36 | 119 | 86 | 50 | 51.0 | 57.5 | 49.5 |
| | 51 | 21 | 23 | 18 | 42 | 48 | 126 | 86 | 50 | 51.0 | 58.0 | 51.5 |
| | 55 | 26 | 23 | 20 | 42 | 150 | 126 | 86 | 48 | 53.5 | 58.0 | 53.0 |
| | 27 | 26 | 24 | 20 | 42 | 315 | 126 | 86 | 48 | 53.5 | 58.5 | 49.5 |
| | 49 | 26 | 25 | 20 | 42 | 125 | 126 | 82 | 48 | 53.5 | 58.0 | 54.5 |
| | 50 | 26 | 21 | 277 | 42 | 125 | 126 | 82 | 46 | 53.5 | 57.5 | 64.0 |
| | 47 | 26 | 24 | 63 | ...... | 125 | 112 | 80 | 46 | 53.5 | 50.0 | 47.0 |
| | 49 | 26 | 21 | 63 | ...... | 150 | 112 | 79 | 55 | 56.5 | 54.5 | 50.5 |
| | 52 | ...... | 20 | 63 | ...... | 2,450 | ...... | 79 | ...... | 56.0 | 49.5 | ...... |
| 1903–4. | | | | | | | | | | | | |
| | 45.5 | 51.5 | 29.5 | 27 | 26 | 37 | 106 | 48 | 42 | 45 | 44 | 46 |
| | 45.0 | 37.0 | 27.0 | 27 | 26 | 38 | 81 | 48 | 42 | 45 | 44 | 42 |
| | 30.0 | 32.5 | 27.0 | 27 | 27 | 36 | 80 | 48 | 46 | 47 | 44 | 42 |
| | 38.0 | 32.0 | 27.0 | 27 | 27 | 34 | 80 | 48 | 46 | 49 | 46 | 49 |
| | 36.5 | 28.0 | 26.5 | 25 | 32 | 28 | 80 | 45 | 48 | 50 | 46 | 47 |
| | 35.0 | 27.0 | 27.0 | 24 | 31 | 30 | 80 | 43 | 49 | 52 | 48 | 52 |
| | 33.5 | 28.5 | 27.5 | 24 | 28 | 29 | 52 | 43 | 50 | 47 | 48 | 58 |
| | 35.0 | 29.5 | 29.0 | 26 | 29 | 30 | 53 | 42 | 50 | 42 | 44 | 51 |
| | 39.0 | 31.5 | 27.5 | 26 | 29 | 30 | 41 | 42 | 48 | 41 | 41 | 51 |
| | 49.0 | 29.5 | 28.5 | 26 | 29 | 30 | 38 | 42 | 43 | 46 | 43 | 50 |
| | 44.5 | 30.0 | 27.0 | 26 | 29 | 54 | 38 | 37 | 44 | 45 | 44 | 52 |
| | 38.5 | 29.0 | 26.0 | 26 | 28 | 48 | 43 | 36 | 40 | 45 | 46 | 51 |
| | 39.0 | 29.0 | 25.5 | 27 | 28 | 38 | 42 | 34 | 38 | 45 | 41 | 51 |
| | 42.5 | 29.0 | 25.5 | 26 | 28 | 33 | 43 | 36 | 37 | 47 | 35 | 51 |
| | 49.0 | 29.0 | 24.5 | 26 | 29 | 30 | 43 | 36 | 42 | 46 | 41 | 51 |
| | 47.5 | 29.5 | 26.5 | 26 | 29 | 32 | 43 | 37 | 43 | 48 | 45 | 53 |
| | 51.0 | 29.5 | 27.5 | 26 | 28 | 33 | 42 | 37 | 43 | 48 | 45 | 53 |
| | 55.5 | 29.5 | 26.5 | 26 | 28 | 45 | 41 | 40 | 43 | 48 | 45 | 53 |
| | 51.0 | 29.5 | 26.5 | 26 | 31 | 45 | 42 | 39 | 44 | 47 | 46 | 57 |
| | 53.0 | 29.5 | 26.5 | 26 | 31 | 09 | 36 | 40 | 45 | 45 | 52 | 56 |
| | 50.5 | 29.5 | 27.5 | 25 | 31 | 35 | 36 | 40 | 46 | 45 | 54 | 57 |
| | 51.0 | 27.5 | 27.5 | 27 | 29 | 36 | 44 | 42 | 46 | 45 | 56 | 56 |
| | 54.5 | 27.5 | 27.0 | 28 | 30 | 280 | 43 | 39 | 45 | 45 | 48 | 50 |
| | 54.0 | 27.5 | 27.5 | 28 | 29 | 95 | 48 | 40 | 46 | 40 | 48 | 49 |
| | 54.0 | 27.5 | 27.5 | 27 | 29 | 96 | 49 | 40 | 46 | 37 | 47 | 49 |
| | 54.0 | 27.5 | 27.5 | 28 | 29 | 93 | 52 | 46 | 45 | 43 | 49 | 47 |
| | 56.5 | 27.5 | 27.5 | 28 | 29 | 79 | 52 | 46 | 43 | 43 | 51 | 46 |
| | 56.0 | 27.5 | 27.5 | 28 | 94 | 91 | 52 | 44 | 44 | 43 | 46 | 42 |
| | 54.0 | 27.5 | 27.5 | 27 | 92 | 162 | 52 | 44 | 44 | 37 | 45 | 40 |
| | 55.5 | 28.0 | 27.5 | 26 | ...... | 161 | 52 | 41 | 45 | 39 | 46 | 40 |
| | 55.5 | ...... | 27.5 | 26 | ...... | 109 | ...... | 41 | ...... | 41 | 46 | ...... |

[illegible]

[illegible] computed [illegible] cross-section and slope data obtained after the high water.

*Daily discharge, in second-feet, of Santa Ana River near Mentone, Cal., for 1901–1904 and 1910–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 1 | 4 | 2 | 2 | 3 | 193 | 86 | 240 | 89 | 29 | 19 | 1 | 1 |
| 2 | 4 | 2 | 2 | 3 | 158 | 86 | 240 | 89 | 29 | 19 | 1 | 1 |
| 3 | 4 | 2 | 2 | 3 | 127 | 86 | 240 | 89 | 29 | 19 | 1 | 1 |
| 4 | 4 | 2 | 2 | 3 | 360 | 290 | 240 | 89 | 29 | 19 | 1 | 1 |
| 5 | 4 | 2 | 2 | 3 | 213 | 158 | 240 | 89 | 29 | 12 | 1 | 1 |
| 6 | 4 | 2 | 2 | 3 | 158 | 142 | 202 | 89 | 29 | 12 | 1 | 1 |
| 7 | 4 | 2 | 2 | 3 | 142 | 142 | 202 | 89 | 29 | 12 | 1 | 1 |
| 8 | 4 | 2 | 2 | 3 | 142 | 290 | 168 | 71 | 29 | 12 | 1 | 1 |
| 9 | 4 | 2 | 2 | 3 | 127 | 690 | 137 | 71 | 29 | 12 | 1 | 1 |
| 10 | 4 | 2 | 2 | 175 | 113 | 1.840 | 137 | 55 | 29 | 7 | 1 | 1 |
| 11 | 4 | 2 | 2 | 62 | 99 | 1,400 | 168 | 41 | 137 | 7 | 1 | 1 |
| 12 | 15 | 2 | 2 | 16 | 99 | 900 | 168 | 41 | 29 | 7 | 1 | 1 |
| 13 | 15 | 2 | 2 | 1 | 99 | 570 | 137 | 41 | 29 | 7 | 1 | 1 |
| 14 | 15 | 2 | 2 | 1 | 158 | 435 | 137 | 41 | 29 | 7 | 1 | 1 |
| 15 | 2 | 2 | 2 | 74 | 158 | 435 | 137 | 71 | 29 | 7 | 1 | 1 |
| 16 | 2 | 2 | 2 | 62 | 158 | 375 | 137 | 55 | 29 | 12 | 1 | 1 |
| 17 | 2 | 2 | 2 | 32 | 99 | 325 | 111 | 55 | 29 | 29 | 1 | 1 |
| 18 | 2 | 2 | 2 | 3 | 86 | 325 | 111 | 55 | 29 | 19 | 1 | 1 |
| 19 | 2 | 2 | 2 | 1 | 86 | 325 | 111 | 41 | 29 | 19 | 1 | 1 |
| 20 | 2 | 2 | 2 | 0 | 86 | 280 | 89 | 41 | 29 | 12 | 1 | 1 |
| 21 | 2 | 2 | 2 | 0 | 74 | 240 | 89 | 41 | 29 | 89 | 1 | 1 |
| 22 | 2 | 2 | 2 | 0 | 74 | 240 | 89 | 41 | 29 | 89 | 1 | 1 |
| 23 | 2 | 2 | 2 | 0 | 86 | 240 | 89 | 41 | 29 | 111 | 1 | 1 |
| 24 | 2 | 2 | 2 | 0 | 86 | 240 | 89 | 41 | 29 | 111 | 1 | 1 |
| 25 | 2 | 2 | 2 | 113 | 74 | 240 | 89 | 41 | 29 | 111 | 1 | 1 |
| 26 | 2 | 2 | 2 | 127 | 74 | 240 | 89 | 41 | 19 | 111 | 1 | 1 |
| 27 | 2 | 2 | 2 | 32 | 86 | 240 | 89 | 41 | 19 | 29 | 1 | 1 |
| 28 | 2 | 2 | 2 | 6 | 86 | 240 | 89 | 41 | 19 | 12 | 1 | 1 |
| 29 | 2 | 2 | 2 | 1,160 | ...... | 240 | 89 | 41 | 19 | 1 | 1 | 19 |
| 30 | 2 | 2 | 2 | 193 | ...... | 240 | 89 | 41 | 19 | 1 | 1 | 19 |
| 31 | 2 | ...... | 2 | 158 | ...... | 240 | ...... | 29 | ...... | 1 | 1 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 1 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 1 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 280 | 1 | 7 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 41 | 1 | 7 | 0 |
| 8 | 1 | 1 | 1 | 1 | 1 | 12 | 1 | 7 | 0 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 12 | 0 |
| 10 | 1 | 1 | 1 | 1 | 1 | 240 | 7 | 12 | 0 |
| 11 | 1 | 1 | 1 | 1 | 1 | 71 | 71 | 12 | 0 |
| 12 | 1 | 1 | 1 | 1 | 1 | 19 | 41 | 12 | 0 |
| 13 | 1 | 1 | 1 | 1 | 1 | 55 | 55 | 12 | 0 |
| 14 | 1 | 1 | 1 | 1 | 1 | 29 | 55 | 12 | 0 |
| 15 | 1 | 1 | 1 | 1 | 1 | 29 | 55 | 12 | 0 |
| 16 | 1 | 1 | 1 | 1 | 1 | 29 | 55 | 12 | 0 |
| 17 | 1 | 1 | 1 | 1 | 1 | 89 | 55 | 7 | 0 |
| 18 | 1 | 1 | 1 | 1 | 1 | 7 | 41 | 7 | 0 |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 41 | 7 | 0 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 29 | 3 | 0 |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 3 | 0 |
| 22 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 3 | 0 |
| 23 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 3 | 0 |
| 24 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 1 | 0 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 1 | 0 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 1 | 0 |
| 27 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 1 | 0 |
| 28 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 1 | 0 |
| 29 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 1 | 0 |
| 30 | 1 | 1 | 1 | 1 | ...... | 7 | 12 | 1 | 0 |
| 31 | 1 | ...... | 1 | 1 | ...... | 1 | ...... | 1 | ...... |

NOTE.—Daily discharge obtained from rating curves applicable as follows: Jan. 23 to Aug. 30, 1910, Aug. 31 to Dec. 31, 1910, Jan. 1 to Mar. 10, 1911, and Mar. 13 to June 30, 1912. Mar. 11–12, 1911, indirect method for shifting channels.

*Daily discharge, in second-feet, of Pacific Light & Power Co.'s canal[a] near Mentone, Cal., for 1901–1903 and 1905–1912.*

| Day. | Mar. | Apr. | May. | Day. | Mar. | Apr. | May. | Day. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1901. | | | | 1901. | | | | 1901. | | | |
| 1 | | .... | 4.6 | 11 | 6.0 | 3.0 | 3.8 | 21 | [illegible] | [illegible] | [illegible] |
| 2 | | .... | 4.6 | 12 | 6.0 | 3.0 | 3.8 | 22 | [illegible] | [illegible] | [illegible] |
| 3 | | .... | 4.6 | 13 | 6.0 | 3.0 | 3.8 | 23 | [illegible] | [illegible] | [illegible] |
| 4 | | .... | 4.6 | 14 | 6.0 | 3.0 | 3.8 | 24 | [illegible] | [illegible] | [illegible] |
| 5 | | .... | 4.6 | 15 | 6.0 | 3.0 | 3.8 | 25 | [illegible] | [illegible] | [illegible] |
| 6 | | 3.0 | 4.0 | 16 | 5.0 | 3.0 | 3.8 | 26 | [illegible] | [illegible] | [illegible] |
| 7 | | 3.0 | 4.0 | 17 | 4.0 | 2.5 | 3.8 | 27 | [illegible] | [illegible] | [illegible] |
| 8 | | 3.0 | 4.0 | 18 | 4.0 | 2.5 | 3.8 | 28 | [illegible] | [illegible] | [illegible] |
| 9 | | 3.0 | 4.0 | 19 | 3.5 | 2.5 | 3.8 | 29 | [illegible] | [illegible] | [illegible] |
| 10 | | 3.0 | 3.8 | 20 | 3.5 | 2.5 | 3.8 | 30 | [illegible] | 4.0 | [illegible] |
| | | | | | | | | 31 | [illegible] | .... | [illegible] |

| Day. | Mar. | Apr. | Day. | Mar. | Apr. | Day. | Mar. | Apr. |
|---|---|---|---|---|---|---|---|---|
| 1902. | | | 1902. | | | 1902. | | |
| 1 | 12 | 11 | 11 | | 15 | 21 | 12 | [illegible] |
| 2 | .... | 15 | 12 | | 15 | 22 | 14 | [illegible] |
| 3 | .... | 15 | 13 | 13 | 15 | 23 | 14 | [illegible] |
| 4 | .... | 15 | 14 | 15 | 15 | 24 | .... | |
| 5 | 12 | 15 | 15 | 15 | 15 | 25 | .... | .... |
| 6 | 11 | 15 | 16 | 13 | 15 | 26 | .... | .... |
| 7 | .... | 15 | 17 | 14 | 14 | 27 | .... | |
| 8 | .... | 15 | 18 | 14 | 14 | 28 | .... | .... |
| 9 | .... | 15 | 19 | 14 | 13 | 29 | .... | .... |
| 10 | .... | 15 | 20 | 14 | 13 | 30 | .... | .... |
| | | | | | | 31 | .... | .... |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | Day. | Jan. | Feb. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903. | | | | | | 1903. | | | | | |
| 1 | 3 | 3 | 2 | .... | 1 | 16 | 9 | .... | 2 | .... | .... |
| 2 | 3 | 3 | 2 | .... | 1 | 17 | 9 | .... | 2 | .... | .... |
| 3 | 3 | 3 | 2 | .... | 1 | 18 | 9 | .... | 2 | .... | .... |
| 4 | 3 | 3 | 2 | .... | 1 | 19 | 9 | 2 | 2 | .... | .... |
| 5 | 4 | 3 | 2 | .... | 1 | 20 | 9 | 2 | 2 | .... | .... |
| 6 | 4 | 3 | 2 | .... | 1 | 21 | 9 | 2 | 2 | .... | .... |
| 7 | 4 | 3 | 2 | .... | 1 | 22 | 9 | 2 | 2 | .... | .... |
| 8 | 4 | 3 | 2 | .... | 1 | 23 | 5 | 2 | 2 | .... | .... |
| 9 | 4 | 3 | 2 | .... | 1 | 24 | 5 | 2 | 2 | .... | .... |
| 10 | 4 | 3 | 2 | .... | .... | 25 | 5 | 2 | 2 | .... | .... |
| 11 | 4 | 3 | 2 | .... | .... | 26 | 4 | 2 | 2 | .... | .... |
| 12 | 4 | .... | 2 | .... | .... | 27 | 4 | 2 | 2 | .... | .... |
| 13 | 10 | .... | 2 | .... | .... | 28 | .... | 2 | 2 | .... | .... |
| 14 | 9 | .... | 2 | .... | .... | 29 | .... | .... | 2 | .... | .... |
| 15 | 9 | .... | 2 | .... | .... | 30 | .... | .... | 2 | .... | .... |
| | | | | | | 31 | .... | .... | .... | .... | .... |

[a] Formerly known as Santa Ana canal and Mentone Power Co.'s canal.

*Daily discharge, in second-feet, of Pacific Light & Power Co.'s canal near Mentone, Cal., 1901–1903 and 1905–1912*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1905.** | | | | | | | | | |
| 1 | 22 | 25 | 60 | 57 | 71 | 0 | 63 | 53 | 66 |
| 2 | 22 | 64 | 57 | 0 | 66 | 0 | 61 | 53 | 63 |
| 3 | 21 | 64 | 60 | 0 | 66 | 0 | 61 | 51 | 63 |
| 4 | 21 | 0 | 60 | 54 | 56 | 0 | 61 | 61 | 63 |
| 5 | 21 | 0 | 60 | 63 | 58 | 0 | 61 | 61 | 66 |
| 6 | 22 | 22 | 57 | 63 | 73 | 0 | 61 | 61 | 66 |
| 7 | 21 | 42 | 57 | 63 | 51 | 0 | 58 | 63 | 66 |
| 8 | 20 | 37 | 54 | 72 | 56 | 0 | 58 | 63 | 61 |
| 9 | 0 | 37 | 51 | 78 | 66 | 0 | 56 | 63 | 61 |
| 10 | 61 | 35 | 48 | 78 | 76 | 0 | 56 | 63 | 63 |
| 11 | 54 | 43 | 48 | 72 | 76 | 0 | 58 | 63 | 73 |
| 12 | 41 | 26 | 51 | 66 | 76 | 66 | 61 | 63 | 76 |
| 13 | 41 | 28 | 0 | 66 | 76 | 43 | 63 | 66 | 76 |
| 14 | 31 | 29 | 0 | 63 | 0 | 71 | 66 | 68 | 78 |
| 15 | 31 | 35 | 0 | 57 | 0 | 71 | 66 | 68 | 78 |
| 16 | 27 | 29 | 97 | 43 | 71 | 71 | 63 | 71 | 78 |
| 17 | 29 | 32 | 78 | 0 | 71 | 68 | 63 | 71 | 78 |
| 18 | 33 | 42 | 0 | 0 | 71 | 68 | 63 | 81 | 78 |
| 19 | 25 | 70 | 0 | 0 | 36 | 68 | 61 | 81 | 73 |
| 20 | 27 | 70 | 0 | 71 | 36 | 68 | 61 | 56 | 68 |
| 21 | 66 | 70 | 0 | 66 | 32 | 68 | 61 | 56 | 68 |
| 22 | 61 | 74 | 78 | 66 | 29 | 68 | 61 | 56 | 61 |
| 23 | 49 | 74 | 66 | 66 | 29 | 68 | 61 | 56 | 68 |
| 24 | 40 | 66 | 78 | 66 | 29 | 68 | 61 | 73 | 68 |
| 25 | 31 | 66 | 78 | 71 | 0 | 68 | 61 | 73 | 51 |
| 26 | 29 | 58 | 60 | 71 | 0 | 68 | 61 | 73 | 56 |
| 27 | 27 | 51 | 85 | 66 | 0 | 68 | 61 | 76 | 56 |
| 28 | 25 | 58 | 85 | 66 | 0 | 63 | 61 | 76 | 66 |
| 29 | 25 | ........ | 78 | 71 | 0 | 63 | 61 | 76 | 66 |
| 30 | 25 | ........ | 42 | 76 | 0 | 63 | 56 | 73 | 66 |
| 31 | 25 | ........ | 57 | ........ | 0 | ........ | 56 | 73 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1905-6.** | | | | | | | | | | | | |
| 1 | 51 | 46 | 34 | 34 | 32 | 51 | 0 | 70 | 71 | 71 | 72 | 63 |
| 2 | 51 | 32 | 32 | 33 | 32 | 48 | 56 | 71 | 66 | 66 | 72 | 58 |
| 3 | 56 | 32 | 34 | 34 | 32 | 48 | 55 | 71 | 70 | 71 | 72 | 58 |
| 4 | 56 | 32 | 32 | 34 | 32 | 43 | 57 | 71 | 71 | 71 | 72 | 63 |
| 5 | 51 | 32 | 32 | 34 | 32 | 56 | 56 | 71 | 70 | 71 | 72 | 63 |
| 6 | 46 | 36 | 32 | 34 | 35 | 52 | 52 | 71 | 70 | 71 | 72 | 63 |
| 7 | 46 | 41 | 32 | 34 | 35 | 51 | 65 | 71 | 70 | 71 | 71 | 66 |
| 8 | 41 | 46 | 32 | 34 | 35 | 50 | 70 | 70 | 70 | 71 | 68 | 64 |
| 9 | 56 | 41 | 32 | 34 | 44 | 50 | 70 | 72 | 70 | 71 | 70 | 63 |
| 10 | 46 | 29 | 30 | 34 | 41 | 50 | 68 | 71 | 70 | 71 | 71 | 62 |
| 11 | 46 | 29 | 32 | 33 | 42 | 46 | 73 | 66 | 70 | 71 | 71 | 62 |
| 12 | 61 | 30 | 32 | 34 | 52 | 43 | 74 | 71 | 70 | 71 | 71 | 62 |
| 13 | 66 | 32 | 29 | 35 | 59 | 40 | 74 | 66 | 71 | 71 | 71 | 59 |
| 14 | 56 | 30 | 29 | 45 | 55 | 27 | 66 | 63 | 71 | 71 | 72 | 60 |
| 15 | 61 | 30 | 32 | 44 | 63 | 43 | 66 | 66 | 71 | 71 | 72 | 64 |
| 16 | 56 | 29 | 30 | 44 | 62 | 49 | 66 | 66 | 71 | 71 | 72 | 63 |
| 17 | 51 | 29 | 30 | 37 | 64 | 0 | 68 | 66 | 70 | 71 | 45 | 58 |
| 18 | 46 | 29 | 29 | 37 | 51 | 11 | 68 | 68 | 70 | 71 | 42 | 58 |
| 19 | 43 | 29 | 29 | 59 | 49 | 35 | 71 | 70 | 71 | 71 | 72 | 56 |
| 20 | 41 | 29 | 29 | 37 | 48 | 44 | 72 | 70 | 71 | 71 | 72 | 56 |
| 21 | 41 | 34 | 32 | 48 | 48 | 43 | 72 | 66 | 70 | 71 | 72 | 57 |
| 22 | 46 | 32 | 25 | 50 | 60 | 58 | 71 | 71 | 72 | 71 | 72 | 54 |
| 23 | 41 | 30 | 25 | 37 | 58 | 55 | 71 | 71 | 71 | 71 | 72 | 52 |
| 24 | 41 | 29 | 26 | 37 | 56 | 71 | 71 | 71 | 71 | 71 | 72 | 52 |
| 25 | 46 | 30 | 26 | 41 | 55 | 35 | 70 | 66 | 71 | 72 | 72 | 52 |
| 26 | 46 | 30 | 25 | 38 | 53 | 34 | 71 | 66 | 66 | 72 | 70 | 52 |
| 27 | 41 | 41 | 29 | 35 | 51 | 26 | 71 | 64 | 64 | 72 | 70 | 59 |
| 28 | 41 | 50 | 28 | 35 | 49 | 55 | 71 | 0 | 71 | 72 | 66 | 62 |
| 29 | 41 | 41 | 30 | 33 | ........ | 34 | 71 | 66 | 71 | 72 | 66 | 63 |
| 30 | 41 | 32 | 29 | 33 | ........ | 21 | 71 | 66 | 71 | 72 | 65 | 64 |
| 31 | 41 | ........ | 27 | 33 | ........ | 27 | ........ | 64 | ........ | 72 | 66 | ........ |

[illegible]

[illegible]

| | |
|---|---|
| [illegible] | [illegible] |

*Daily discharge, in second-feet, of Pacific Light & Power Co.'s canal near Mentone, Cal., 1901–1903 and 1905–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1908–9.** | | | | | | | | | | | | |
| 1 | 58 | 65 | 40 | 40 | 76 | 76 | 76 | 76 | 73 | 74 | 73 | 63 |
| 2 | 59 | 48 | 38 | 38 | 76 | 76 | 76 | 76 | 73 | 72 | 60 | 56 |
| 3 | 60 | 45 | 56 | 38 | 74 | 76 | 76 | 76 | 73 | 73 | 56 | 53 |
| 4 | 60 | 41 | 56 | 38 | 76 | 76 | 76 | 74 | 73 | 70 | 55 | 52 |
| 5 | 59 | 40 | 50 | 37 | 76 | 76 | 76 | 73 | 73 | 70 | 55 | 54 |
| 6 | 45 | 40 | 47 | 39 | 76 | 76 | 76 | 73 | 0 | 70 | 60 | 53 |
| 7 | 45 | 40 | 41 | 37 | 76 | 76 | 76 | 73 | 0 | 70 | 62 | 56 |
| 8 | 53 | 40 | 43 | 37 | 56 | 76 | 76 | 73 | 0 | 73 | 63 | 55 |
| 9 | 48 | 39 | 43 | 35 | 76 | 76 | 76 | 73 | 60 | 64 | 61 | 53 |
| 10 | 66 | 39 | 43 | 63 | 76 | 76 | 76 | 73 | 60 | 70 | 61 | 55 |
| 11 | 61 | 40 | 41 | 49 | 76 | 76 | 76 | 73 | 65 | 64 | 55 | 63 |
| 12 | 59 | 40 | 41 | 48 | 76 | 76 | 76 | 73 | 65 | 64 | 55 | 63 |
| 13 | 62 | 37 | 41 | 66 | 0 | 76 | 76 | 73 | 65 | 64 | 61 | 59 |
| 14 | 66 | 39 | 40 | 68 | 0 | 76 | 76 | 73 | 65 | 63 | 60 | 60 |
| 15 | 66 | 38 | 40 | 64 | 0 | 76 | 76 | 73 | 65 | 63 | 61 | 58 |
| 16 | 63 | 40 | 40 | 60 | 76 | 76 | 76 | 73 | 65 | 59 | 60 | 59 |
| 17 | 62 | 38 | 40 | 58 | 76 | 76 | 76 | 73 | 78 | 59 | 66 | 54 |
| 18 | 64 | 40 | 37 | 49 | 76 | 76 | 76 | 73 | 76 | 62 | 68 | 59 |
| 19 | 54 | 38 | 36 | 48 | 76 | 76 | 76 | 73 | 78 | 62 | 63 | 63 |
| 20 | 46 | 37 | 36 | 46 | 76 | 76 | 76 | 73 | 78 | 62 | 62 | 65 |
| 21 | 46 | 37 | 40 | 77 | 76 | 76 | 76 | 73 | 76 | 60 | 61 | 59 |
| 22 | 52 | 38 | 41 | 48 | 76 | 76 | 76 | 73 | 81 | 61 | 60 | 59 |
| 23 | 45 | 38 | 41 | 76 | 76 | 76 | 76 | 73 | 80 | 61 | 61 | 58 |
| 24 | 52 | 49 | 41 | 76 | 76 | 76 | 76 | 73 | 80 | 75 | 68 | 62 |
| 25 | 48 | 39 | 40 | 76 | 76 | 76 | 76 | 73 | 80 | 71 | 67 | 57 |
| 26 | 48 | 39 | 41 | 76 | 76 | 76 | 76 | 73 | 78 | 67 | 65 | 63 |
| 27 | 50 | 40 | 39 | 76 | 76 | 76 | 76 | 73 | 78 | 68 | 67 | 57 |
| 28 | 53 | 41 | 38 | 76 | 76 | 76 | 76 | 73 | 75 | 67 | 59 | 69 |
| 29 | 57 | 38 | 38 | 76 | ...... | 76 | 76 | 73 | 74 | 64 | 57 | 65 |
| 30 | 62 | 41 | 37 | 76 | ...... | 76 | 76 | 73 | 74 | 68 | 57 | 63 |
| 31 | 61 | ...... | 38 | 76 | ...... | 76 | ...... | 73 | ...... | 73 | 64 | ...... |
| **1909–10.** | | | | | | | | | | | | |
| 1 | 62 | 56 | 50 | 0 | 74 | 64 | 74 | 78 | 73 | 57 | 55 | 58 |
| 2 | 61 | 55 | 51 | 0 | 72 | 66 | 66 | 78 | 72 | 58 | 57 | 58 |
| 3 | 65 | 52 | 54 | 0 | 72 | 72 | 64 | 78 | 72 | 57 | 58 | 59 |
| 4 | 59 | 52 | 41 | 0 | 73 | 74 | 72 | 78 | 72 | 56 | 51 | 54 |
| 5 | 53 | 50 | 44 | 0 | 73 | 76 | 71 | 78 | 55 | 56 | 55 | 51 |
| 6 | 54 | 50 | 50 | 0 | 68 | 72 | 72 | 79 | 74 | 63 | 56 | 55 |
| 7 | 47 | 48 | 50 | 0 | 76 | 72 | 78 | 76 | 72 | 59 | 57 | 55 |
| 8 | 47 | 46 | 51 | 0 | 73 | 72 | 79 | 66 | 72 | 59 | 59 | 60 |
| 9 | 59 | 49 | 72 | 39 | 76 | 72 | 78 | 78 | 71 | 59 | 59 | 56 |
| 10 | 57 | 56 | 66 | 45 | 76 | 68 | 79 | 76 | 72 | 56 | 62 | 60 |
| 11 | 56 | 53 | 76 | 57 | 74 | 68 | 79 | 76 | 68 | 55 | 58 | 58 |
| 12 | 59 | 47 | 76 | 52 | 63 | 68 | 74 | 76 | 63 | 62 | 55 | 60 |
| 13 | 60 | 49 | 74 | 58 | 68 | 0 | 78 | 76 | 71 | 56 | 56 | 58 |
| 14 | 58 | 57 | 73 | 54 | 73 | 0 | 78 | 76 | 71 | 64 | 59 | 58 |
| 15 | 59 | 58 | 73 | 58 | 68 | 73 | 79 | 73 | 73 | 66 | 55 | 60 |
| 16 | 60 | 59 | 71 | 49 | 68 | 77 | 78 | 76 | 73 | 0 | 56 | 62 |
| 17 | 58 | 53 | 65 | 56 | 68 | 79 | 78 | 76 | 71 | 0 | 58 | 60 |
| 18 | 56 | 53 | 59 | 62 | 68 | 78 | 77 | 77 | 66 | 0 | 57 | 52 |
| 19 | 56 | 51 | 38 | 55 | 73 | 77 | 77 | 78 | 64 | 0 | 68 | 52 |
| 20 | 55 | 51 | 65 | 55 | 64 | 78 | 77 | 77 | 65 | 0 | 66 | 59 |
| 21 | 57 | .8 | 71 | 57 | 73 | 78 | 77 | 76 | 66 | 0 | 68 | 59 |
| 22 | 49 | .8 | 63 | 57 | 72 | 79 | 77 | 76 | 60 | 0 | 66 | 55 |
| 23 | 45 | 51 | 68 | 64 | 66 | 79 | 73 | 76 | 64 | 43 | 64 | 62 |
| 24 | 51 | 49 | 78 | 66 | 66 | 74 | 73 | 76 | 60 | 54 | 62 | 64 |
| 25 | 54 | 46 | 78 | 65 | 66 | 65 | 73 | 74 | 60 | 55 | 60 | 58 |
| 26 | 54 | 57 | 77 | 62 | 64 | 71 | 78 | 78 | 57 | 54 | 59 | 59 |
| 27 | 54 | 63 | 79 | 62 | 62 | 70 | 73 | 73 | 59 | 54 | 63 | 60 |
| 28 | 55 | 46 | 74 | 78 | 64 | 72 | 78 | 74 | 59 | 66 | 62 | 60 |
| 29 | 52 | 5.3 | 70 | 78 | ...... | 68 | 79 | 74 | 59 | 68 | 63 | 60 |
| 30 | 54 | 58 | 70 | 79 | ...... | 71 | 78 | 73 | 60 | 63 | 60 | 70 |
| 31 | 51 | ...... | 70 | 79 | ...... | 70 | ...... | 73 | ...... | 63 | 62 | ...... |

*[illegible] temperatures of Pacific Light & Power Co.'s canal near Mentone, [illegible] 190[illegible]–190[illegible] and 190[illegible]–191[illegible]*—Continued.

| [illegible] | [illegible] | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sep. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 70 | 74 | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 71 | 74 | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 72 | 74 | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 72 | 74 | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 74 | 72 | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 74 | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 74 | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 74 | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 74 | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 74 | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily discharge, in second-feet, of Greenspot pipe line near Mentone, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | ........ | 6.0 | 0.0 | 6.0 | 3.0 | 5.0 | 4.0 | 0.0 | 1.0 | 4.0 |
| 2 | ........ | 6.0 | .0 | 5.0 | 3.0 | 5.0 | 4.0 | .0 | 1.0 | 4.0 |
| 3 | ........ | .0 | .0 | 5.0 | .0 | 5.0 | 4.0 | .0 | 1.0 | 3.5 |
| 4 | ........ | .0 | .0 | 4.0 | .0 | 5.0 | 3.0 | .0 | 1.0 | 3.5 |
| 5 | ........ | .0 | .0 | 4.0 | .0 | 5.0 | 4.0 | .0 | 1.0 | 3.5 |
| 6 | ........ | .0 | .5 | 4.0 | .0 | 4.5 | 5.0 | .0 | 4.0 | 3.5 |
| 7 | 1.3 | .0 | 7.0 | .0 | .0 | 4.5 | .0 | .0 | 4.0 | 3.5 |
| 8 | 1.6 | .0 | 7.0 | 2.5 | 5.0 | 4.5 | .0 | .0 | 4.0 | 3.5 |
| 9 | 1.6 | 1.0 | 7.0 | 2.5 | 5.0 | 4.5 | .0 | .0 | 4.0 | 3.5 |
| 10 | 1.6 | 2.3 | 7 0 | 2.5 | 5.0 | 4.5 | .0 | 1.0 | 4.0 | 4.0 |
| 11 | 1.8 | 6.5 | 6.0 | 2.5 | 5.0 | 4.5 | .0 | 1.0 | 4.0 | 4.0 |
| 12 | .0 | 6.5 | 6.0 | 2.5 | 5.0 | 4.5 | .0 | 1.0 | 4.0 | 4.0 |
| 13 | .0 | 6.5 | 6.0 | 2.5 | 5.0 | 4.5 | .0 | 1.0 | 4.0 | 4.0 |
| 14 | .0 | 6.5 | 6.0 | 2.5 | 5.0 | 4.5 | .0 | 1.0 | 4.0 | 4.0 |
| 15 | .0 | 6.5 | 6.0 | 3.0 | 5.0 | 4.5 | .0 | 1.0 | 4.0 | 4.0 |
| 16 | .0 | 6.5 | 6.0 | 3.0 | 5.0 | 4.5 | .0 | 1.0 | 4.0 | 4.0 |
| 17 | 1.0 | 7.5 | .0 | 3.5 | 4.0 | 2.5 | .0 | 1.0 | 4.0 | 4.0 |
| 18 | 2.0 | 1.5 | .0 | 3.5 | 4.0 | 2.5 | .0 | 1.0 | 4.0 | 4.0 |
| 19 | 9.0 | 3.0 | .0 | 3.5 | 4.0 | 2.5 | .0 | 1.0 | 4.0 | 4.0 |
| 20 | 7.5 | 1.0 | .0 | 3.5 | 3.0 | 2.5 | .0 | 1.0 | 4.0 | 4.0 |
| 21 | .5 | 1.0 | .0 | .0 | 3.0 | 3.0 | .0 | 1.0 | 4.0 | 4.0 |
| 22 | .6 | .0 | .0 | .0 | 3.0 | 3.0 | .0 | 1.0 | 5.5 | 4.0 |
| 23 | .6 | .0 | 7.3 | .0 | 3.0 | 3.0 | .0 | 1.0 | 5.5 | 4.0 |
| 24 | .5 | .4 | 7.3 | .0 | 3.0 | 3.0 | .0 | 1.0 | 5.5 | 4.0 |
| 25 | .0 | .0 | 7.3 | .8 | 3.0 | 3.0 | .0 | 1.0 | 5.5 | 4.0 |
| 26 | 9.1 | .0 | 7.3 | 1.0 | 3.0 | 5.0 | .0 | 1.0 | 5.5 | 4.0 |
| 27 | 9.0 | .0 | 7.3 | 1.0 | 4.0 | 5.0 | .0 | 1.0 | 5.5 | 4.0 |
| 28 | 9.0 | .0 | 7.3 | 2.0 | 4.0 | 5.0 | .0 | 1.0 | 5.5 | 4.0 |
| 29 | 7.0 | .0 | 7.3 | 2.0 | 4.0 | 4.0 | .0 | 1.0 | 5.5 | 4.0 |
| 30 | 7.0 | .0 | 7.3 | 3.0 | 4.5 | ........ | .0 | 1.0 | 5.5 | 4.0 |
| 31 | ........ | .0 | ........ | 3.0 | 4.5 | ........ | .0 | ........ | 4.0 | ........ |

*Combined daily discharge, in second-feet, of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 42 | 82 | 142 | 211 | 233 | 92 | 76 | 76 | 66 |
| 2 | 40 | 78 | 142 | 211 | 256 | 92 | 74 | 62 | 58 |
| 3 | 40 | 75 | 142 | 311 | 233 | 92 | 76 | 58 | 56 |
| 4 | 40 | 157 | 128 | 311 | 209 | 92 | 72 | 58 | 54 |
| 5 | 39 | 106 | 128 | 311 | 208 | 102 | 72 | 58 | 56 |
| 6 | 41 | 95 | 128 | 311 | 208 | 157 | 72 | 62 | 56 |
| 7 | 39 | 651 | 128 | 211 | 230 | 157 | 72 | 64 | 58 |
| 8 | 39 | 437 | 128 | 142 | 230 | 157 | 76 | 66 | 58 |
| 9 | 37 | 256 | 116 | 142 | 154 | 100 | 66 | 64 | 56 |
| 10 | 65 | 211 | 116 | 142 | 170 | 100 | 72 | 64 | 58 |
| 11 | 51 | 233 | 116 | 142 | 170 | 105 | 66 | 58 | 66 |
| 12 | 50 | 343 | 105 | 142 | 170 | 105 | 66 | 58 | 66 |
| 13 | 68 | 632 | 106 | 128 | 170 | 105 | 66 | 64 | 62 |
| 14 | 101 | 340 | 95 | 142 | 170 | 105 | 66 | 62 | 62 |
| 15 | 66 | 302 | 95 | 157 | 154 | 105 | 66 | 64 | 60 |
| 16 | 62 | 282 | 95 | 173 | 154 | 94 | 62 | 62 | 62 |
| 17 | 60 | 256 | 95 | 173 | 139 | 80 | 62 | 72 | 56 |
| 18 | 51 | 233 | 173 | 211 | 125 | 82 | 64 | 70 | 62 |
| 19 | 50 | 233 | 173 | 211 | 125 | 97 | 64 | 69 | 66 |
| 20 | 48 | 233 | 173 | 211 | 125 | 80 | 64 | 64 | 68 |
| 21 | 79 | 233 | 191 | 173 | 113 | 82 | 62 | 64 | 62 |
| 22 | 1,380 | 191 | 191 | 233 | 113 | 84 | 64 | 62 | 62 |
| 23 | 282 | 191 | 211 | 233 | 113 | 82 | 64 | 64 | 60 |
| 24 | 173 | 191 | 311 | 233 | 113 | 82 | 78 | 70 | 64 |
| 25 | 128 | 173 | 311 | 233 | 139 | 82 | 74 | 70 | 60 |
| 26 | 106 | 157 | 282 | 233 | 125 | 80 | 70 | 68 | 66 |
| 27 | 157 | 157 | 343 | 233 | 113 | 80 | 70 | 70 | 60 |
| 28 | 105 | 142 | 378 | 233 | 125 | 78 | 70 | 62 | 80 |
| 29 | 95 | ........ | 311 | 233 | 102 | 76 | 66 | 60 | 68 |
| 30 | 87 | ........ | 311 | 233 | 102 | 76 | 70 | 60 | 66 |
| 31 | 87 | ........ | 311 | ........ | 92 | ........ | 76 | 66 | ........ |

*Combined daily discharge, in second-feet, of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., for 1909–1912—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 1 | 44 | 58 | 32 | a4,500 | 112 | 98 | 122 | [illegible] | 75 | 58 | 57 | 73 |
| 2 | 44 | 58 | 54 | ...... | 110 | 95 | 140 | [illegible] | 74 | 60 | 59 | 73 |
| 3 | 69 | 54 | 58 | ...... | 110 | 98 | 107 | [illegible] | 74 | 58 | 60 | 74 |
| 4 | 62 | 54 | 44 | ...... | 121 | 100 | 95 | [illegible] | 74 | 58 | 53 | 58 |
| 5 | 58 | 52 | 46 | ...... | 98 | 102 | 97 | [illegible] | 57 | 58 | 57 | 55 |
| 6 | 58 | 52 | 32 | ...... | 116 | 95 | 98 | 98 | 78 | 65 | 58 | 59 |
| 7 | 50 | 50 | 52 | ...... | 114 | 98 | 98 | 95 | 74 | 61 | 59 | 59 |
| 8 | 50 | 48 | 54 | ...... | 111 | 98 | 98 | 77 | 74 | 61 | 61 | 64 |
| 9 | 62 | 52 | 487 | ...... | 139 | 98 | 98 | [illegible] | 73 | 61 | 61 | 60 |
| 10 | 66 | 95 | 641 | ...... | 179 | 94 | 98 | 95 | 74 | 58 | 64 | 66 |
| 11 | 58 | 56 | 173 | ...... | 177 | 94 | 132 | 95 | 70 | 57 | 60 | 66 |
| 12 | 62 | 50 | 142 | ...... | 168 | 94 | 137 | 95 | 65 | 64 | 57 | 73 |
| 13 | 62 | 32 | 98 | ...... | 131 | 109 | 141 | 95 | 73 | 58 | 59 | 73 |
| 14 | 60 | 40 | 79 | ...... | 136 | 109 | 141 | 95 | 77 | 65 | 61 | 66 |
| 15 | 62 | 77 | 78 | ...... | 94 | 98 | 142 | 94 | 79 | 65 | 57 | 64 |
| 16 | 62 | 62 | 74 | ...... | 94 | 108 | 141 | 95 | 79 | 95 | 58 | 77 |
| 17 | 60 | 58 | 69 | ...... | 94 | 105 | 131 | 79 | 77 | 95 | 60 | 64 |
| 18 | 59 | 56 | 62 | ...... | 94 | 104 | 138 | 88 | 72 | 74 | 59 | 56 |
| 19 | 59 | 54 | 40 | ...... | 90 | 108 | 108 | 89 | 70 | 74 | 70 | 56 |
| 20 | 59 | 54 | 69 | ...... | 90 | 104 | 96 | 98 | 71 | 68 | 68 | 63 |
| 21 | 60 | 3 | 74 | ...... | 90 | 104 | 98 | 95 | 68 | 65 | 70 | 63 |
| 22 | 52 | 3 | 66 | ...... | 99 | 105 | 88 | 95 | 62 | 63 | 66 | 59 |
| 23 | 48 | 54 | 70 | 167 | 92 | 105 | 79 | 95 | 66 | 60 | 66 | 66 |
| 24 | 54 | 52 | 90 | 129 | 92 | 100 | 79 | 95 | 62 | 72 | 64 | 65 |
| 25 | 56 | 48 | 90 | 219 | 92 | 108 | 84 | 95 | 62 | 66 | 62 | 62 |
| 26 | 56 | 60 | 158 | 185 | 90 | 114 | 84 | 98 | 59 | 60 | 61 | 63 |
| 27 | 56 | 66 | 160 | 165 | 88 | 96 | 79 | 75 | 61 | 60 | 65 | 64 |
| 28 | 56 | 48 | 76 | 181 | 90 | 98 | 84 | 76 | 61 | 68 | 64 | 64 |
| 29 | 54 | 56 | 72 | 181 | ...... | 131 | 90 | 76 | 61 | 70 | 65 | 64 |
| 30 | 56 | 60 | 72 | 164 | ...... | 119 | 88 | 75 | 62 | 65 | 62 | 74 |
| 31 | 54 | ...... | 807 | 164 | ...... | 118 | ...... | 75 | ...... | 65 | 95 | ...... |
| **1910–11.** | | | | | | | | | | | | |
| 1 | 72 | 54 | 45 | 44 | 261 | 158 | 313 | 150 | 103 | 96 | 65 | 61 |
| 2 | 63 | 48 | 44 | 45 | 230 | 154 | 313 | 160 | 103 | 95 | 71 | 66 |
| 3 | 61 | 47 | 46 | 43 | 198 | 158 | 313 | 161 | 103 | 95 | 67 | 66 |
| 4 | 62 | 50 | 44 | 43 | 431 | 362 | 313 | 161 | 103 | 95 | 66 | 55 |
| 5 | 61 | 46 | 46 | 44 | 284 | 231 | 312 | 163 | 101 | 86 | 66 | 58 |
| 6 | 55 | 47 | 45 | 44 | 229 | 215 | 275 | 163 | 101 | 88 | 66 | 58 |
| 7 | 59 | 46 | 43 | 44 | 213 | 214 | 275 | 163 | 101 | 86 | 65 | 60 |
| 8 | 62 | 44 | 43 | 43 | 213 | 362 | 230 | 145 | 102 | 86 | 64 | 62 |
| 9 | 61 | 45 | 43 | 43 | 199 | 761 | 209 | 145 | 101 | 88 | 63 | 62 |
| 10 | 62 | 43 | 44 | 248 | 186 | 1,900 | 210 | 129 | 101 | 83 | 61 | 66 |
| 11 | 66 | 44 | 45 | 130 | 172 | 1,470 | 241 | 115 | 127 | 83 | 66 | 66 |
| 12 | 73 | 43 | 43 | 84 | 171 | 972 | 241 | 115 | 107 | 83 | 67 | 66 |
| 13 | 73 | 44 | 44 | 59 | 171 | 642 | 209 | 115 | 106 | 83 | 67 | 67 |
| 14 | 71 | 50 | 43 | 56 | 231 | 508 | 210 | 115 | 106 | 80 | 67 | 67 |
| 15 | 60 | 54 | 43 | 146 | 230 | 507 | 208 | 145 | 106 | 81 | 67 | 71 |
| 16 | 56 | 50 | 43 | 133 | 230 | 448 | 207 | 129 | 106 | 86 | 67 | 69 |
| 17 | 56 | 47 | 43 | 90 | 171 | 397 | 182 | 131 | 106 | 105 | 66 | 70 |
| 18 | 59 | 47 | 46 | 74 | 158 | 398 | 183 | 129 | 103 | 93 | 66 | 66 |
| 19 | 53 | 46 | 46 | 65 | 159 | 398 | 182 | 115 | 106 | 95 | 59 | 70 |
| 20 | 48 | 46 | 47 | 62 | 159 | 353 | 161 | 114 | 106 | 88 | 60 | 64 |
| 21 | 61 | 45 | 45 | 59 | 146 | 312 | 161 | 115 | 106 | 89 | 60 | 60 |
| 22 | 66 | 47 | 44 | 57 | 146 | 312 | 160 | 115 | 105 | 89 | 59 | 59 |
| 23 | 56 | 46 | 46 | 55 | 159 | 312 | 161 | 115 | 105 | 111 | 58 | 59 |
| 24 | 56 | 46 | 45 | 62 | 158 | 313 | 160 | 115 | 106 | 111 | 60 | 58 |
| 25 | 60 | 44 | 43 | 186 | 146 | 313 | 159 | 115 | 106 | 111 | 63 | 57 |
| 26 | 65 | 53 | 45 | 127 | 146 | 313 | 160 | 115 | 96 | 111 | 67 | 65 |
| 27 | 67 | 50 | 45 | 103 | 158 | 313 | 160 | 114 | 95 | 73 | 67 | 70 |
| 28 | 61 | 50 | 44 | 76 | 158 | 313 | 160 | 113 | 95 | 78 | 67 | 73 |
| 29 | 61 | 45 | 44 | 1,220 | ...... | 313 | 160 | 114 | 96 | 73 | 67 | 92 |
| 30 | 60 | 44 | 45 | 263 | ...... | 313 | 160 | 115 | 96 | 67 | 63 | 91 |
| 31 | 58 | ...... | 43 | 230 | ...... | 313 | ...... | 103 | ...... | 71 | 61 | ...... |

a Estimated.

*Combined daily discharge, in second-feet, of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., for 1909–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| **1911–12.** | | | | | | | | | |
| 1 | 79 | 52 | 45 | 47 | 44 | 39 | 67 | 91 | 70 |
| 2 | 63 | 50 | 47 | 49 | 43 | 44 | 72 | 94 | 70 |
| 3 | 60 | 50 | 39 | 46 | 43 | 44 | 72 | 91 | 68 |
| 4 | 59 | 55 | 49 | 46 | 40 | 54 | 74 | 86 | 66 |
| 5 | 57 | 55 | 46 | 46 | 43 | 50 | 72 | 86 | 64 |
| 6 | 55 | 52 | 48 | 46 | 42 | 351 | 74 | 87 | 64 |
| 7 | 55 | 50 | 47 | 46 | 42 | 112 | 72 | 84 | 64 |
| 8 | 51 | 50 | 48 | 49 | 42 | 83 | 74 | 87 | 62 |
| 9 | 52 | 51 | 48 | 47 | 40 | 66 | 90 | 92 | 60 |
| 10 | 53 | 51 | 48 | 45 | 40 | 311 | 85 | 92 | 60 |
| 11 | 52 | 61 | 42 | 45 | 40 | 142 | 150 | 92 | 58 |
| 12 | 64 | 52 | 48 | 46 | 40 | 85 | 119 | 92 | 62 |
| 13 | 66 | 51 | 46 | 46 | 42 | 126 | 132 | 92 | 54 |
| 14 | 66 | 51 | 44 | 44 | 40 | 100 | 135 | 92 | 60 |
| 15 | 64 | 50 | 46 | 44 | 40 | 102 | 135 | 92 | 58 |
| 16 | 66 | 50 | 45 | 44 | 40 | 100 | 137 | 87 | 58 |
| 17 | 66 | 50 | 46 | 46 | 42 | 89 | 135 | 87 | 53 |
| 18 | 68 | 50 | 48 | 43 | 42 | 77 | 120 | 87 | 53 |
| 19 | 63 | 50 | 48 | 43 | 40 | 74 | 120 | 87 | 53 |
| 20 | 65 | 51 | 46 | 44 | 40 | 64 | 108 | 83 | 60 |
| 21 | 62 | 50 | 46 | 42 | 41 | 72 | 101 | 83 | 60 |
| 22 | 60 | 47 | 46 | 42 | 38 | 72 | 92 | 80 | 60 |
| 23 | 59 | 48 | 46 | 43 | 41 | 67 | 92 | 74 | 62 |
| 24 | 55 | 50 | 46 | 42 | 41 | 64 | 92 | 78 | 64 |
| 25 | 61 | 48 | 47 | 42 | 38 | 66 | 92 | 78 | 62 |
| 26 | 64 | 48 | 45 | 42 | 38 | 66 | 92 | 78 | 64 |
| 27 | 72 | 48 | 45 | 43 | 40 | 67 | 99 | 74 | 67 |
| 28 | 58 | 48 | 46 | 44 | 40 | 67 | 98 | 74 | 67 |
| 29 | 57 | 48 | 51 | 43 | 39 | 67 | 93 | 78 | 64 |
| 30 | 55 | 48 | 47 | 44 | ........ | 78 | 91 | 78 | 72 |
| 31 | 52 | ........ | 47 | 44 | ........ | 74 | ........ | 76 | ........ |

NOTE.—Beginning September, 1911, these values include the water diverted by the Greenspot pipe line.

*Monthly discharge of Santa Ana River, exclusive of Pacific Light & Power Co.'s canal, at Warmspring, Cal., for 1896–1901.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1896.** | | | | |
| July | 76 | 48 | 63 | 3,891 |
| August | 83 | 33 | 57 | 3,492 |
| September | 77 | 27 | 55 | 3,289 |
| **1896–97.** | | | | |
| October | 170 | 38 | 55 | 3,387 |
| November | 52 | 30 | 33 | 1,939 |
| December | 40 | 33 | 35 | 2,176 |
| January | 101 | 27 | 62 | 3,836 |
| February | 580 | 72 | 181 | 10,060 |
| March | 460 | 64 | 119 | 7,317 |
| April | 186 | 101 | 146 | 8,675 |
| May | 101 | 29 | 61 | 3,769 |
| June | 67 | 57 | 63 | 3,737 |
| July | 85 | 57 | 67 | 4,119 |
| August | 80 | 34 | 57 | 3,505 |
| September | 61 | 38 | 47 | 2,779 |
| The year | 580 | 27 | 77.2 | 55,300 |

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|
| | [illegible] | | | | |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | | | | |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | | | | |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | | | | |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | | | | |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |

*Monthly discharge of Pacific Light & Power Co.'s canal*[a] *at Warmspring, Cal., for 1896–1898 and 1901.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1896.** | | | | |
| July | | | 14 | 861 |
| August | | | 14 | 861 |
| September | | | 14 | 833 |
| **1896–97.** | | | | |
| October | | | 16 | 984 |
| November | | | 3.5 | 2,083 |
| December | | | 4.2 | 2,582 |
| January | 8.5 | 3.2 | 5.6 | 344 |
| February | 6 | .0 | 4.0 | 222 |
| March | 6 | .5 | 5.2 | 320 |
| April | 12 | .0 | 3.8 | 226 |
| May | 20 | .0 | 15.0 | 922 |
| June | 19 | .0 | 16.6 | 988 |
| July | 18.5 | 10.6 | 15.6 | 960 |
| August | 20 | 17.4 | 18.3 | 1,125 |
| September | | | 20 | 1,190 |
| The year | 20 | .0 | 10.6 | 11,900 |
| **1897–98.** | | | | |
| October | | | 12.4 | 762 |
| November | | | 7 | 417 |
| December | | | 7 | 430 |
| January | | | 9 | 553 |
| February | | | 8 | 444 |
| March | | | 8 | 492 |
| April | | | 8 | 476 |
| May | | | 6 | 369 |
| June | | | 4 | 238 |
| July | | | 2 | 123 |
| August | | | 2 | 123 |
| September | | | 2 | 119 |
| The year | | | 6.28 | 4,550 |
| **1898.** | | | | |
| October | | | 0 | 0 |
| November | | | 0 | 0 |
| December | | | 0 | 0 |
| **1901.** | | | | |
| March | 6 | 0 | 2.71 | 167 |
| April | 4.62 | 0 | 2.34 | 139 |
| May | 4.62 | 3.8 | 3.96 | 243 |

[a] Formerly known as Santa Ana canal and Mentone Power Co.'s canal.

*Monthly discharge of Santa Ana River and canals at Warmspring, Cal., for 1896–1898.*

[Drainage area, 188 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1896.** | | | | | | |
| July | | | 77 | 0.41 | 0.47 | 4,73[illegible] |
| August | | | 71 | .38 | .44 | 4,3[illegible] |
| September | | | 69 | .37 | .41 | 4,12[illegible] |
| **1896-97.** | | | | | | |
| October | | | 71 | .38 | .44 | 4,373 |
| November | | | 37 | .19 | .21 | 2,14[illegible] |
| December | | | 39 | .21 | .24 | 2,455 |
| January | 104 | 35 | 68 | .36 | .41 | 4,179 |
| February | 585 | 77 | 185 | .98 | 1.02 | 10,282 |
| March | 465 | 70 | 124 | .66 | .76 | 7,[illegible] |
| April | 190 | 113 | 150 | .80 | .89 | 8,[illegible] |
| May | 113 | 48 | 76 | .41 | .47 | 4,[illegible] |
| June | 86 | 60 | 80 | .42 | .47 | 4,723 |
| July | 102 | 70 | 83 | .44 | .51 | 5,0[illegible] |
| August | 100 | 54 | 75 | .40 | .46 | 4,6[illegible] |
| September | 81 | 58 | 67 | .35 | .39 | 3,9[illegible] |
| The year | | | 87.9 | .468 | 6.27 | 63,0[illegible] |
| **1897-98.** | | | | | | |
| October | 270 | 45 | 54 | .29 | .33 | 3,347 |
| November | 50 | 40 | 45 | .24 | .27 | 2,6[illegible] |
| December | 38 | 29 | 33 | .18 | .21 | 2,0[illegible] |
| January | | | 49 | .26 | .30 | 2,9[illegible] |
| February | | | 48 | .26 | .27 | 2,6[illegible] |
| March | | | 40 | .21 | .24 | 2,44[illegible] |
| April | | | 39 | .21 | .23 | 2,323 |
| May | | | 61 | .32 | .37 | 3,72[illegible] |
| June | | | 48 | .25 | .28 | 2,540 |
| July | | | 43 | .23 | .26 | 2,625 |
| August | | | 43 | .23 | .26 | 2,653 |
| September | | | 38 | .20 | .22 | 2,223 |
| The year | | | 45.1 | .240 | 3.24 | 32,6[illegible] |
| **1898.** | | | | | | |
| October | | | 26 | .14 | .16 | 1,5[illegible] |
| November | | | 22 | .12 | .13 | 1,2[illegible] |
| December | | | 22 | .12 | .14 | 1,3[illegible] |

*Monthly discharge of Santa Ana River and Pacific Light & Power Co.'s canal[a] near Mentone, Cal., for 1902–1912.*

[Drainage area, 182 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1902.** | | | | | | | |
| January | 45 | 20 | 24 | 0.13 | 0.15 | 1,476 | |
| February | 240 | 20 | 38 | .21 | .22 | 2,110 | |
| March | 485 | 41 | 79 | .43 | .50 | 4,858 | |
| April | 71 | 43 | 51 | .28 | .31 | 3,035 | |
| May | 45 | 31 | 36 | .20 | .23 | 2,214 | |
| June | 47 | 23 | 33 | .18 | .20 | 1,964 | |
| July | 32 | 23 | 26 | .14 | .16 | 1,599 | |
| August | 30 | 22 | 25 | .14 | .16 | 1,537 | |
| September | 29 | 22 | 24 | .13 | .15 | 1,428 | |
| The period | | | | | | 20,200 | |

[a] Formerly known as Santa Ana canal and Mentone Power Co.'s canal.

*Monthly discharge of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., for 1902–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1902–3.** | | | | | | | |
| October | 55 | 30 | 39 | 0.21 | 0.24 | 2,398 | |
| November | 43 | 19 | 24 | .13 | .15 | 1,428 | |
| December | 27 | 19 | 22 | .12 | .14 | 1,353 | |
| January | 277 | 19 | 33 | .18 | .21 | 2,029 | |
| February | 105 | 36 | 48 | .26 | .27 | 2,666 | |
| March | 2,451 | 38 | 148 | .81 | .93 | 9,100 | |
| April | 4,908 | 106 | 352 | 1.93 | 2.15 | 20,945 | |
| May | 113 | 79 | 92 | .51 | 59 | 5,657 | |
| June | 79 | 47 | 64 | 35 | .39 | 3,808 | |
| July | 57 | 44 | 51 | .28 | .32 | 3,136 | |
| August | 59 | 50 | 55 | .30 | .35 | 3,382 | |
| September | 64 | 45 | 52 | .29 | .32 | 3,094 | |
| The year | 4,908 | 19 | 81.7 | .449 | 6.06 | 59,600 | |
| **1903–4.** | | | | | | | |
| October | 57 | 30 | 47 | .26 | .30 | 2,890 | |
| November | 52 | 27 | 30 | .16 | .18 | 1,785 | |
| December | 30 | 25 | 27 | .15 | .17 | 1,660 | |
| January | 28 | 24 | 26 | .14 | .16 | 1,599 | |
| February | 94 | 26 | 33 | .18 | .19 | 1,898 | |
| March | 280 | 28 | 64 | .35 | .40 | 3,935 | |
| April | 106 | 36 | 53 | .29 | .32 | 3,154 | |
| May | 48 | 34 | 41 | .23 | .27 | 2,521 | |
| June | 50 | 37 | 44 | .24 | .27 | 2,618 | |
| July | 52 | 37 | 45 | .25 | .29 | 2,767 | |
| August | 56 | 35 | 46 | .25 | .29 | 2,828 | |
| September | 58 | 40 | 50 | .27 | .30 | 2,975 | |
| The year | 280 | 24 | 42.2 | .232 | 3.14 | 30,600 | |
| **1904–5.** | | | | | | | |
| October | 56 | 22 | 48 | .26 | .30 | 2,951 | |
| November | 22 | 17.7 | 20 | .11 | .12 | 1,190 | |
| December | 23 | 18.4 | 20 | .11 | .13 | 1,230 | |
| January | 108 | 22 | 36.6 | .201 | .23 | 2,251 | |
| February | 234 | 26 | 97.6 | .536 | .56 | 5,420 | |
| March | 321 | 48 | 130 | .714 | .82 | 7,993 | |
| April | 120 | 63 | 90.5 | .497 | .55 | 5,385 | |
| May | 256 | 91 | 172 | .945 | 1.09 | 10,580 | |
| June | 94 | 64 | 77.7 | .427 | .48 | 4,624 | |
| July | 69 | 57 | 62.9 | .346 | .40 | 3,867 | |
| August | 82 | 52 | 66.8 | .367 | .42 | 4,107 | |
| September | 79 | 52 | 68.3 | .375 | .42 | 4,064 | |
| The year | 321 | 17.7 | 74.2 | .408 | 5.52 | 53,700 | |
| **1905–6.** | | | | | | | |
| October | 67 | 42 | 49.2 | .270 | .31 | 3,025 | |
| November | 250 | 30 | 47.5 | .261 | .29 | 2,827 | |
| December | 107 | 31 | 38.4 | .211 | .24 | 2,362 | |
| January | 181 | 34 | 46.8 | .257 | .30 | 2,880 | |
| February | 121 | 33 | 63.1 | .347 | .36 | 3,500 | |
| March | 2,440 | 51 | 530 | 2.91 | 3.36 | 32,600 | |
| April | 495 | 186 | 274 | 1.50 | 1.67 | 16,300 | |
| May | 536 | 163 | 245 | 1.35 | 1.56 | 15,100 | |
| June | 329 | 135 | 172 | .945 | 1.05 | 10,200 | |
| July | 140 | 90 | 119 | .654 | .75 | 7,320 | |
| August | 111 | 67 | 80.5 | .442 | .51 | 4,950 | |
| September | 74 | 58 | 64.1 | .352 | .39 | 3,810 | |
| The year | 2,440 | 30 | 144 | .793 | 10.79 | 105,000 | |
| **1906–7.** | | | | | | | |
| October | 74 | 66 | 71.4 | .392 | .45 | 4,390 | |
| November | 69 | 54 | 60.3 | .331 | .37 | 3,590 | |
| December | 859 | 56 | 111 | .610 | .70 | 6,820 | |
| January | 851 | 86 | 239 | 1.31 | 1.51 | 14,700 | B. |
| February | 776 | 128 | 292 | 1.60 | 1.67 | 16,200 | B. |
| March | 1,960 | 184 | 681 | 3.74 | 4.31 | 41,900 | B. |
| April | 776 | 265 | 552 | 3.03 | 3.38 | 32,800 | B. |
| May | 352 | 186 | 236 | 1.30 | 1.50 | 14,500 | B. |
| June | 186 | 142 | 171 | .940 | 1.05 | 10,200 | B. |
| July | 154 | 109 | 135 | .742 | .86 | 8,300 | B. |
| August | 109 | 78 | 90.2 | .496 | .57 | 5,550 | B. |
| September | 132 | 62 | 73.2 | .402 | .45 | 4,360 | B. |
| The year | 1,960 | 54 | 226 | 1.24 | 16.82 | 163,000 | |

*Monthly discharge of Santa Ana River and Pacific Light & Power Co.'s canal near Mentone, Cal., for 1902–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1907–8.** | | | | | | | |
| October | 126 | 68 | 84.2 | 0.463 | 0.53 | 5,180 | B. |
| November | 148 | 64 | 119 | .654 | .73 | 7,080 | B. |
| December | 74 | 55 | 60.4 | .332 | .38 | 3,710 | B. |
| January | 267 | 53 | 82.1 | .451 | .52 | 5,050 | A. |
| February | 252 | 73 | 135 | .742 | .80 | 7,760 | A. |
| March | 198 | 83 | 125 | .687 | .79 | 7,690 | A. |
| April | 155 | 79 | 98.9 | .543 | .61 | 5,880 | A. |
| May | 120 | 63 | 76.3 | .419 | .48 | 4,690 | A. |
| June | 69 | 55 | 61.6 | .338 | .38 | 3,670 | A. |
| July | 71 | 58 | 64.3 | .353 | .41 | 3,950 | A. |
| August | 70 | 54 | 63.8 | .351 | .40 | 3,920 | A. |
| September | 77 | 44 | 58.8 | .323 | .36 | 3,500 | A |
| The year | 267 | 44 | 85.8 | .471 | 6.39 | 62,100 | |
| **1908–9.** | | | | | | | |
| October | 68 | 47 | 57.8 | .318 | .37 | 3,550 | A. |
| November | 67 | 39 | 42.8 | .235 | .26 | 2,550 | A. |
| December | 58 | 38 | 43.4 | .238 | .27 | 2,670 | A. |
| January | 1,383 | 37 | 120 | .659 | .76 | 7,380 | B. |
| February | 651 | 75 | 238 | 1.31 | 1.36 | 13,200 | B. |
| March | 378 | 95 | 183 | 1.01 | 1.16 | 11,300 | B. |
| April | 311 | 128 | 209 | 1.15 | 1.28 | 12,400 | B. |
| May | 256 | 92 | 158 | .868 | 1.00 | 9,720 | B. |
| June | 157 | 76 | 97.3 | .535 | .60 | 5,790 | B. |
| July | 78 | 62 | 69.0 | .379 | .44 | 4,240 | B. |
| August | 76 | 58 | 64.2 | .353 | .41 | 3,950 | B. |
| September | 80 | 54 | 61.8 | .340 | .38 | 3,680 | B. |
| The year | 1,383 | 37 | 112 | .616 | 8.29 | 80,400 | |
| **1909–10.** | | | | | | | |
| October | 68 | 48 | 57.9 | .318 | .37 | 3,560 | B. |
| November | 85 | 3 | 53.0 | .291 | .33 | 3,150 | B. |
| December | 897 | 40 | 136 | .747 | .86 | 8,360 | B. |
| Jan. 23–31 | 219 | 129 | 173 | .951 | .32 | 3,090 | |
| February | 179 | 88 | 112 | .615 | .64 | 6,220 | |
| March | 131 | 90 | 103 | .566 | .65 | 6,330 | |
| April | 142 | 79 | 105 | .577 | .64 | 6,250 | |
| May | 90 | 75 | 84.9 | .466 | .54 | 5,220 | |
| June | 79 | 57 | 69.4 | .381 | .43 | 4,130 | |
| July | 85 | 57 | 65.0 | .357 | .41 | 4,000 | |
| August | 95 | 53 | 62.5 | .343 | .40 | 3,840 | |
| September | 77 | 55 | 65.0 | .357 | .40 | 3,870 | |
| The year | 897 | 3 | 90.7 | .498 | 5.99 | 58,000 | |
| **1910–11.** | | | | | | | |
| October | 73 | 48 | 61.4 | .337 | .39 | 3,780 | |
| November | 54 | 43 | 47.0 | .258 | .29 | 2,800 | |
| December | 47 | 43 | 44.4 | .244 | .28 | 2,730 | |
| January | 1,220 | 43 | 128 | .703 | .81 | 7,870 | B. |
| February | 431 | 146 | 197 | 1.08 | 1.12 | 10,900 | A. |
| March | 1,900 | 158 | 453 | 2.49 | 2.87 | 27,900 | B. |
| April | 313 | 159 | 213 | 1.17 | 1.30 | 12,700 | A. |
| May | 163 | 103 | 130 | .714 | .82 | 7,990 | A. |
| June | 137 | 95 | 104 | .571 | .64 | 6,190 | A. |
| July | 111 | 67 | 89 | .489 | .56 | 5,470 | A. |
| August | 71 | 58 | 64.5 | .354 | .41 | 3,970 | A. |
| September | 92 | 57 | 65.8 | .362 | .40 | 3,920 | A. |
| The year | 1,900 | 43 | 133 | .731 | 9.89 | 96,200 | |
| **1911–12.** | | | | | | | |
| October | 79 | 51 | 60.6 | .333 | .38 | 3,730 | A. |
| November | 61 | 47 | 50.5 | .277 | .31 | 3,000 | A. |
| December | 51 | 39 | 46.3 | .254 | .29 | 2,850 | A. |
| January | 49 | 42 | 44.6 | .245 | .28 | 2,740 | A. |
| February | 44 | 38 | 40.7 | .224 | .24 | 2,340 | A. |
| March | 351 | 39 | 92.7 | .509 | .59 | 5,700 | A. |
| April | 150 | 67 | 99.5 | .547 | .61 | 5,920 | A. |
| May | 94 | 74 | 84.9 | .466 | .54 | 5,220 | A. |
| June | 72 | 53 | 62.0 | .341 | .38 | 3,690 | A. |
| The period | ........ | ........ | ........ | ........ | ........ | 35,200 | |

NOTE.—Beginning September, 1911, these values include the water diverted by the Greenspot pipe line.

[illegible] MEASUREMENTS [illegible]

[illegible]

[illegible]

| Date. | Hydrographer. | Locality. | Discharge. |
| --- | --- | --- | --- |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | Do. | |
| [illegible] | [illegible] | Do. | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | Do. | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | do | [illegible] | |
| [illegible] | [illegible] | Do. | |
| [illegible] | [illegible] | Do. | |
| [illegible] | [illegible] | Do. | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | Do. | |
| [illegible] | do | Do. | |
| [illegible] | [illegible] | Do. | |
| [illegible] | do | Do. | |
| [illegible] | do | Do. | |
| [illegible] | do | Do. | |
| [illegible] | do | Do. | |
| [illegible] | do | [illegible] | |
| [illegible] | [illegible] | Do. | |
| [illegible] | do | Do. | |
| Sept. [illegible] | do | Do. | |
| [illegible] | do | Do. | |
| Sept. [illegible] | do | Do. | |
| [illegible] | do | Do. | |
| [illegible] | do | Do. | |
| [illegible] | do | [illegible] | |
| June [illegible] | [illegible] | Do. | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | Do. | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | Do. | |
| [illegible] | do | [illegible] | |
| Sept. [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | do | [illegible] | |
| [illegible] | do | [illegible] | |
| [illegible] | [illegible] | [illegible] | |
| [illegible] | do | Do. | |
| [illegible] | do | Do. | |
| Sept. [illegible] | do | Do. | |
| [illegible] | do | Do. | |
| Sept. [illegible] | do | Do. | |
| Aug. [illegible] | do | Do. | |
| Sept. [illegible] | do | Do. | |
| Sept. [illegible] | do | Do. | |
| June [illegible] | [illegible] | Do. | |
| Aug. [illegible] | do | Do. | |
| July [illegible] | [illegible] | Do. | |
| Sept. [illegible] | [illegible] | Do. | |
| July [illegible] | [illegible] | Do. | |
| Oct. [illegible] | [illegible] | Do. | |
| Aug. [illegible] | [illegible] | Do. | |
| Apr. [illegible] | [illegible] | Colton bridge | |
| May [illegible] | [illegible] | Do. | |
| May [illegible] | [illegible] | Orange Avenue | |
| Apr. [illegible] | | Do. | |
| May [illegible] | [illegible] | [illegible] mile below Orange Avenue | |
| Apr. [illegible] | [illegible] | [illegible] mile above [illegible] | |
| Sept. [illegible] | W. B. Clapp | [illegible] | |
| Sept. [illegible] | [illegible] La Rue | Do. | |
| Apr. [illegible] | [illegible] W. [illegible] | [illegible] miles below [illegible] | |
| Apr. [illegible] | do | [illegible] miles above [illegible] | |
| Do. | do | [illegible] mile above [illegible] | |
| May 1, [illegible] | do | [illegible] mile above [illegible] | |
| Do. | do | [illegible] mile below [illegible] | |

*Discharge measurements of Santa Ana River at Rincon wagon bridge, San Bernardino County, Cal.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1899. | | *Sec.-ft.* | 1903. | | *Sec.-ft.* |
| Sept 13 | J. B. Lippincott | 72.6 | Aug. 19 | W. B. Clapp | 60 |
| Oct. 25 | .....do | 130 | Sept. 23 | .....do | [illegible] |
| 26 | .....do | 147 | Oct. 30 | .....do | 93 |
| Nov. 18 | .....do | 151 | Nov. 25 | .....do | 102 |
| Dec. 28 | .....do | 105 | | | |
| | | | 1904. | | |
| 1900. | | | Jan. 26 | W. B. Clapp | 109 |
| Jan. 18 | | 224 | Feb. 29 | .....do | 102 |
| 29 | | 184 | Mar. 21 | Clapp and Murphy | 107 |
| Feb. 21 | | 162 | Apr. 29 | W. B. Clapp | [illegible] |
| Apr. 17 | W. P. Searcy | 102 | May 23 | .....do | [illegible] |
| June 24 | .....do | 69.2 | June 20 | Clapp and Hardy | 63 |
| July 7 | .....do | 84.5 | July 23 | E. C. La Rue | 62 |
| 28 | S. G. Bennett | 60.8 | Aug. 20 | .....do | 69 |
| Aug. 15 | W. P. Searcy | 87.1 | Sept. 20 | W. B. Clapp | 74 |
| Sept. 3 | .....do | 88.2 | 28 | E. C. La Rue | 75 |
| Oct. 5 | W. W. Cockins, jr. | 74.2 | Oct. 22 | .....do | 73 |
| 16 | | 122 | Nov. 19 | .....do | 103 |
| Nov. 5 | | 117 | Dec. 10 | .....do | 110 |
| Dec. 4 | | 338 | | | |
| 31 | | 210 | 1905. | | |
| | | | Feb. 24 | | 205 |
| 1901. | | | Apr. 17 | | 172 |
| Aug. 27 | J. B. Lippincott | 78.6 | May 16 | | 115 |
| 31 | .....do | 65.3 | June 6 | | [illegible] |
| | | | July 29 | | 70 |
| 1902. | | | Sept. 21 | | 76 |
| Sept. 2 | W. B. Clapp | 74.9 | | | |
| | | | 1906. | | |
| 1903. | | | June 25 | | 42 |
| Mar. 31 | W. B. Clapp | 400 | Aug. 3 | | 56 |
| Apr. 29 | O. W. Peterson | 193 | Nov. 7 | | 94 |
| May 18 | W. B. Clapp | 108 | | | |
| June 12 | .....do | 85 | 1907. | | |
| July 23 | .....do | 59 | Aug. 23 | | 63 |

*Discharge measurements of Santa Ana River 1 mile below railroad bridge, Rincon, Cal. in 1898–1900.*

| Date. | Hydrographer. | Discharge. River. | Discharge. Canal. | Discharge. Total for river. |
|---|---|---|---|---|
| 1898 | | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| June 21 | F. H. Olmsted | 79.8 | 3.2 | 83 |
| Aug. 29 | ....do | 62.7 | 4.2 | 66.9 |
| 1899 | | | | |
| Jan. 3 | S. G. Bennett | 209 | 2.3 | 211 |
| 16 | F. Rolfe | ........ | ........ | 232 |
| 28 | ....do | 216 | 6.5 | 222 |
| Feb. 15 | ....do | 181 | 1.8 | 183 |
| Mar. 4 | ....do | ........ | ........ | 109 |
| 18 | ....do | ........ | ........ | 200 |
| Apr. 6 | ....do | ........ | ........ | 172 |
| 18 | ....do | 101 | 2.8 | 104 |
| May 2 | ....do | 100 | 2.4 | 102 |
| 15 | ....do | 100 | 4 | 104 |
| June 3 | ....do | 110 | 3.2 | 113 |
| 15 | ....do | 84.4 | 1.9 | 86.3 |
| July 4 | ....do | 68.9 | 2.4 | 71.3 |
| 16 | Bennett and Rolfe | 101 | 1.9 | 103 |
| 16 | ....do | 87.9 | 1.6 | 89.5 |
| 18 | F. Rolfe | 64.1 | 1.5 | 65.6 |
| Aug. 1 | ....do | 57.8 | 3.4 | 61.2 |
| 15 | ....do | 64.7 | 3.2 | 67.9 |
| 30 | ....do | 65.9 | 2 | 67.9 |
| 31 | ....do | 68 | 3.1 | 71.1 |
| Sept. 13 | J. B. Lippincott | 72.7 | ........ | ........ |
| 1900 | | | | |
| Apr. 16 | S. G. Bennett | ........ | ........ | 90.9 |

*Discharge measurements of Greenspot pipe line, San Bernardino County, Cal., in 1896–1904.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1896. | | *Sec.-ft.* | 1901. | | *Sec.-ft.* |
| Nov. 21 | J. B. Lippincott | 0.40 | Feb. 5 | S. G. Bennett | [a]0.00 |
| | | | Mar. 4 | ....do | [a]2.73 |
| 1898. | | | 30 | ....do | [a]0.00 |
| Jan. 8 | J. B. Lippincott | .38 | July 6 | ....do | [a]3.68 |
| Apr. 12 | ....do | [a]1.88 | 6 | ....do | [b]3.49 |
| 12 | ....do | [b]1.74 | Aug. 20 | ....do | 0.00 |
| 29 | ....do | 2.94 | Oct. 8 | ....do | 5.77 |
| June 12 | ....do | .63 | Dec. 5 | ....do | 1.65 |
| July 23 | ....do | 2.20 | | | |
| Sept. 8 | ....do | 0.00 | 1902. | | |
| Oct. 18 | F. H. Olmsted | 1.36 | May 31 | S. G. Bennett | [a]2.70 |
| Nov. 9 | ....do | .50 | 31 | ....do | [b]2.50 |
| Dec. 8 | ....do | .50 | July 10 | ....do | [a]0.00 |
| 8 | ....do | [b].15 | Sept. 3 | W. W. Clapp | [a]0.00 |
| | | | Nov. 5 | S. G. Bennett | [a]2.83 |
| 1899. | | | | | |
| Jan. 12 | S. G. Bennett | 0.00 | 1903. | | |
| Feb. 18 | ....do | [a]3.53 | Aug. 31 | W. B. Clapp | [a]6.3 |
| 18 | ....do | [b].35 | | | |
| Mar. 23 | ....do | 3.71 | 1904. | | |
| May 6 | ....do | [a]1.43 | Jan. 29 | W. B. Clapp | [a]4.2 |
| 6 | ....do | [b].62 | May 14 | ....do | [a]1.8 |
| 31 | ....do | .14 | 28 | ....do | [a]4.9 |
| July 15 | ....do | [a].59 | June 29 | ....do | [a]7.3 |
| 15 | ....do | [b].44 | Sept. 21 | ....do | [a]6.0 |
| 27 | ....do | [a].64 | Nov. 11 | E. C. La Rue | [a]1.1 |
| 27 | ....do | [b].54 | | | |
| Aug. 24 | ....do | [b].28 | | | |
| 1900. | | | | | |
| Apr. 14 | S. G. Bennett | 2.15 | | | |
| July 13 | ....do | [a]0.00 | | | |
| Oct. 2 | W. W. Cockins, jr. | [a].12 | | | |

[a] Intake. [b] Outlet (lower end).

*Daily discharge, in second-feet, of Greenspot pipe line, Santa Ana River, at headworks weir, for 1901.*

| Date. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Date. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.0 | 3.5 | 2.5 | 6.0 | 6.0 | 3.0 | 1.3 | 16 | 1.5 | 1.8 | 2.5 | 6.0 | 6.0 | 4.3 | 1.5 |
| 2 | .5 | 3.5 | 2.5 | 6.0 | 6.0 | 3.0 | 1.3 | 17 | 1.5 | 1.8 | 0.0 | 4.0 | 6.0 | .5 | 1.8 |
| 3 | .5 | 3.5 | 2.5 | 6.0 | 6.0 | 2.0 | 1.6 | 18 | 2.5 | 1.8 | 0.0 | 4.0 | 6.0 | .5 | 1.5 |
| 4 | .5 | 3.5 | 2.5 | 6.0 | 6.0 | 2.0 | 1.7 | 19 | 2.5 | 1.8 | 0.0 | 4.0 | 6.0 | .5 | 1.8 |
| 5 | .5 | 3.5 | 2.5 | 6.0 | 6.0 | 2.0 | 1.7 | 20 | 3.5 | 1.8 | 0.0 | 4.0 | 6.0 | 0.0 | 1.6 |
| 6 | .5 | 3.5 | 0.0 | 6.0 | 6.0 | 0.0 | 1.8 | 21 | 3.5 | 1.8 | 0.0 | 4.0 | 6.0 | 0.0 | 1.6 |
| 7 | .5 | 1.6 | 3.0 | 6.0 | 6.0 | 0.0 | 1.1 | 22 | 0.0 | 2.5 | 0.0 | 4.0 | 6.0 | 1.5 | 1.6 |
| 8 | .5 | 1.6 | 3.0 | 6.0 | 6.0 | 0.0 | 1.2 | 23 | 3.5 | 2.5 | 0.0 | 4.0 | 6.0 | 1.5 | 0.0 |
| 9 | .5 | 1.6 | 3.0 | 6.0 | 6.0 | 0.0 | 1.8 | 24 | 3.5 | 2.5 | 2.5 | 6.0 | 6.0 | 1.6 | 0.0 |
| 10 | .5 | 1.6 | 3.0 | 6.0 | 6.0 | 1.7 | 1.8 | 25 | 2.5 | 2.5 | 3.0 | 6.0 | 6.0 | 1.8 | 0.0 |
| 11 | 1.5 | 1.6 | 3.0 | 6.0 | 6.0 | 3.5 | 1.4 | 26 | 2.5 | 2.5 | 5.0 | 6.0 | 6.0 | 2.1 | 0.0 |
| 12 | 1.5 | 1.6 | 5.5 | 6.0 | 4.0 | 2.6 | 1.3 | 27 | 2.5 | 2.5 | 5.0 | 6.0 | 6.0 | 1.8 | 0.0 |
| 13 | 1.5 | 1.6 | 2.5 | 6.0 | 4.0 | 2.6 | 1.3 | 28 | 2.5 | 2.5 | 8.0 | 6.0 | 6.0 | 1.8 | 0.0 |
| 14 | 1.5 | 1.8 | 2.5 | 6.0 | 4.0 | 3.7 | 1.6 | 29 | 3.8 | 2.5 | 6.0 | 6.0 | 6.0 | 1.6 | 0.0 |
| 15 | 1.5 | 1.8 | 2.5 | 6.0 | 4.0 | 4.5 | 1.4 | 30 | 3.5 | 2.5 | 6.0 | 6.0 | 6.0 | 1.3 | 2.5 |
| | | | | | | | | 31 | ...... | 2.5 | 6.0 | ...... | 6.0 | ...... | 2.5 |

*Monthly discharge of Greenspot pipe line at head of Crafton ditch, Cal., for 1897–1901.*

| Month. | Discharge in second-feet (mean). | Run-off (total in acre-feet). | Month. | Discharge in second-feet (mean). | Run-off (total in acre-feet). |
|---|---|---|---|---|---|
| **1897.** | | | **1899–1900.** | | |
| August | 21.5 | 1,320 | October | 6.6 | 406 |
| September | 15.8 | 940 | November | 8.6 | 512 |
| | | | December | 9.5 | 584 |
| **1897–98.** | | | January | 2.1 | 129 |
| October (1–21) | 13.2 | 550 | February | 2.5 | 139 |
| April | 17.0 | 1,010 | March | 1.5 | 92 |
| May | 17.2 | 1,060 | April | 2.3 | 137 |
| June | 13.2 | 786 | May | 1.9 | 117 |
| July | 9.1 | 560 | June | .4 | 24 |
| August | 9.1 | 560 | July 1–15 | 1.1 | 33 |
| September | 8.2 | 488 | August | 0 | 0 |
| | | | September | 0 | 0 |
| **1898–99.** | | | | | |
| October | 9.0 | 553 | **1900–1901.** | | |
| November | 10 | 595 | October | 0 | 0 |
| December | 10.7 | 658 | November | 0 | 0 |
| January (1–9) | 11 | 196 | December | 0 | 0 |
| February | 11.6 | 644 | June | 1.5 | 89 |
| March | 12.2 | 750 | July | 2.3 | 141 |
| April | 11.8 | 702 | August | 2.7 | 166 |
| May | 11.2 | 689 | September | 5.5 | 327 |
| June | 5.4 | 300 | | | |
| July | 5.8 | 312 | **1901.** | | |
| August | 5.8 | 312 | October | 5.7 | 350 |
| September | 4.1 | 244 | November | 1.7 | 101 |
| | | | December | 1.2 | 74 |

Highlands or North Fork canal diverts water from Santa Ana River at the mouth of the canyon, opposite the Mentone Power Co.'s power house.

*Discharge measurements of Highlands or North Fork canal at intake weir, San Bernardino County, Cal., in 1896–1904.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| **1896.** | | *Sec.-feet.* | **1901.** | | *Sec.-feet.* |
| Nov. 21 | J. B. Lippincott | 8.50 | July 6 | S. G. Bennett | 12.25 |
| | | | Aug. 20 | do | 15.7[illegible] |
| **1899.** | | | Oct. 8 | do | 14.[illegible] |
| Jan. 8 | J. B. Lippincott | 11.91 | Dec. 5 | do | [illegible] |
| Mar. 9 | H. Crowe | 10.76 | May 31 | do | [illegible] |
| Apr. 12 | J. B. Lippincott | 12.40 | | | |
| 29 | do | 17.03 | **1902.** | | |
| June 12 | do | 11.37 | May 31 | S. G. Bennett | [illegible] |
| Sept. 8 | do | 13.29 | July 10 | do | [illegible] |
| Oct. 18 | F. H. Olmsted | 9.85 | Sept. 3 | W. B. Clapp | [illegible] |
| Nov. 9 | do | 8.12 | Nov. 5 | S. G. Bennett | 10.42 |
| Dec. 8 | do | 6.95 | | | |
| | | | **1903.** | | |
| **1900.** | | | Apr. 24 | W. B. Clapp | [illegible] |
| Feb. 18 | S. G. Bennett | 8.07 | May 16 | do | [illegible] |
| Mar. 23 | do | 11.78 | Aug. 31 | do | [illegible] |
| May 6 | do | 7.70 | | | |
| 31 | do | 6.74 | **1904.** | | |
| June 15 | do | 10.30 | Jan. 29 | W. B. Clapp | 10.7 |
| July 15 | do | 13.14 | May 14 | do | 11.4 |
| 27 | do | 11.92 | 28 | do | 12.0 |
| Aug. 24 | do | 4.28 | June 29 | do | 12.5 |
| | | | Sept. 21 | do | 16.4 |
| **1900.** | | | Nov. 11 | E. C. La Rue | [illegible] |
| Apr. 14 | S. G. Bennett | 7.48 | | | |
| July 13 | do | (a) | | | |
| Oct. 2 | W. W. Cockins, jr | 5.61 | | | |

a Water not going through weir basin; weir was being repaired.

*Daily discharge, in second-feet, of Highlands canal at Sand Box weir for 1901.*

| Day. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|
| 1 | 12.7 | 14.7 | 14.6 | 16.5 | 16.3 | 8.8 | 7.9 |
| 2 | 11.7 | 14.2 | 13.6 | 16.5 | 15.9 | 9.0 | 7.9 |
| 3 | 11.3 | 12.5 | ....... | 16.5 | 14.4 | 9.8 | 7.7 |
| 4 | 12.1 | 12.0 | 13.0 | 16.5 | 14.4 | 8.8 | 8.2 |
| 5 | 11.4 | 12.6 | 12.4 | 16.5 | 14.3 | 8.8 | 8.2 |
| 6 | 11.5 | 13.9 | 14.1 | 15.4 | 14.1 | 8.2 | 10.0 |
| 7 | 12.2 | 13.8 | 15.8 | 16.5 | 13.8 | 8.4 | 7.4 |
| 8 | 12.3 | 14.9 | 14.4 | 15.8 | 14.3 | 10.5 | 7.4 |
| 9 | 11.1 | 14.4 | 14.5 | 12.8 | 14.5 | 10.5 | 7.0 |
| 10 | 11.9 | 14.9 | 14.5 | 16.2 | 14.1 | 9.5 | 7.4 |
| 11 | 12.7 | 15.3 | 15.4 | 16.1 | 14.3 | 9.2 | 7.2 |
| 12 | 12.7 | 14.7 | 14.6 | 16.1 | 14.3 | 10.3 | 6.7 |
| 13 | 12.0 | 14.6 | 15.3 | 15.2 | 13.4 | 10.8 | 6.7 |
| 14 | 12.0 | 14.7 | 15.4 | 15.4 | 12.1 | 10.0 | 7.0 |
| 15 | 10.0 | 15.3 | 16.0 | 14.5 | 14.3 | 9.2 | 6.3 |
| 16 | 11.3 | 15.3 | 19.4 | 15.4 | 13.1 | 9.5 | 7.0 |
| 17 | 11.1 | 14.7 | ....... | 16.1 | 13.3 | 10.4 | 7.0 |
| 18 | 11.1 | 15.4 | 13.0 | 15.8 | 15.0 | 9.5 | 7.0 |
| 19 | 11.1 | 12.9 | 13.1 | 16.5 | 14.5 | 9.5 | 7.2 |
| 20 | 14.6 | 12.8 | 12.0 | 16.4 | 14.2 | 7.7 | 7.4 |
| 21 | 14.6 | 12.3 | ....... | 14.3 | 14.5 | 8.9 | 7.4 |
| 22 | 14.0 | 14.6 | ....... | 15.4 | 12.0 | 7.9 | 7.2 |
| 23 | 13.9 | 15.3 | 6.0 | 14.5 | 12.1 | 9.5 | 7.2 |
| 24 | 14.1 | 14.2 | 12.0 | 14.6 | 14.3 | 11.1 | 7.2 |
| 25 | 14.4 | 14.2 | 17.5 | 16.3 | 12.0 | 9.7 | 7.2 |
| 26 | 13.9 | 15.0 | 17.5 | 16.3 | 12.1 | 9.2 | 7.0 |
| 27 | 14.9 | 14.6 | 17.5 | 16.5 | 11.0 | 10.0 | 7.0 |
| 28 | 14.0 | 14.4 | 17.5 | 16.5 | 9.0 | 8.2 | 7.2 |
| 29 | 14.3 | 15.1 | 17.5 | 13.9 | 8.8 | 8.2 | 7.2 |
| 30 | 14.1 | 14.4 | 17.5 | 16.3 | 11.2 | 9.2 | 7.2 |
| 31 | ....... | 14.2 | 17.5 | ....... | 12.0 | ....... | 7.2 |

Redlands or South Fork canal diverts water from Santa Ana River at the mouth of the canyon, opposite the Mentone Power Co.'s power house.

*Discharge measurements of Redlands or South Fork canal at Sand Box weir in 1896-1904.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1896. | | *Sec.-feet.* | 1900. | | *Sec.-feet.* |
| July 29 | J. H. Quinton | 40.62 | July 13 | S. G. Bennett | 10.65 |
| Nov. 21 | J. B. Lippincott | 12.00 | Oct. 2 | W. W. Cockins, jr | 6.25 |
| 1898. | | | 1901. | | |
| Jan. 8 | J. B. Lippincott | 21.32 | Mar. 30 | S. G. Bennett | 30.00 |
| Mar. 9 | H. Crowe | 22.22 | May 31 | .....do | 19.60 |
| Apr. 12 | J. B. Lippincott | 16.70 | July 6 | .....do | 19.91 |
| 29 | .....do | 13.00 | Aug. 20 | .....do | 16.75 |
| June 12 | .....do | 18.40 | Oct. 8 | .....do | 24.10 |
| July 23 | .....do | 15.00 | Dec. 5 | .....do | 14.27 |
| Sept. 8 | .....do | 15.40 | | | |
| Oct. 18 | F. H. Olmsted | 7.26 | 1902. | | |
| Nov. 9 | .....do | 10.20 | May 31 | S. G. Bennett | 19.60 |
| Dec. 8 | .....do | 12.00 | July 10 | .....do | 10.06 |
| | | | Sept. 3 | W. B. Clapp | 14.60 |
| 1899. | | | Nov. 5 | S. G. Bennett | 7.55 |
| Jan. 12 | S. G. Bennett | 15.10 | | | |
| Feb. 18 | .....do | 15.70 | 1903. | | |
| Mar. 23 | .....do | 17.00 | Apr. 24 | W. B. Clapp | 9.6 |
| May 6 | .....do | 15.49 | May 16 | .....do | 29.0 |
| 31 | .....do | 14.67 | Aug. 31 | .....do | 28.0 |
| June 15 | .....do | 7.76 | | | |
| 27 | .....do | 12.40 | 1904. | | |
| July 15 | .....do | 12.70 | Jan. 29 | W. B. Clapp | 12.3 |
| Aug. 24 | .....do | 5.71 | May 14 | .....do | 23.8 |
| | | | 28 | .....do | 26.0 |
| 1900. | | | June 29 | .....do | 22.0 |
| Apr. 14 | S. G. Bennett | 12.10 | Nov. 11 | E. C. La Rue | 9.6 |

[illegible]

[illegible] small stream from [illegible] Canyon enters Santa Ana River [illegible] short distance below the mouth of the canyon where [illegible] Santa Ana leaves the foothills.

[illegible] measurements of [illegible] Canyon Creek, [illegible]

[illegible]

*Discharge measurements of Redlands or Bolen tunnel in 1896–1905.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1896. | | *Sec.-feet.* | 1901. | | *Sec.-feet.* |
| Nov. 21 | J. B. Lippincott | 1.00 | July 6 | S. G. Bennett | 1.40 |
| | | | Dec. 5 | .....do | .90 |
| 1898. | | | 1902. | | |
| June 12 | J. B. Lippincott | 1.24 | July 10 | S. G. Bennett | .90 |
| Sept. 8 | .....do | 1.24 | | | |
| 1899. | | | 1903. | | |
| June 15 | S. G. Bennett | .67 | Aug. 31 | W. B. Clapp | 1.8 |
| July 15 | .....do | 1.03 | | | |
| Aug. 24 | .....do | 1.10 | 1904. | | |
| | | | May 28 | W. B. Clapp | 1.59 |
| 1900. | | | June 29 | .....do | 1.55 |
| Apr. 14 | S. G. Bennett | .88 | Sept. 21 | .....do | 1.04 |
| July 13 | .....do | .84 | 1905. | | |
| Oct. 2 | W. W. Cockins, jr | .85 | Sept. 22 | | 1.10 |

## MILL CREEK IN CANYON, CAL.

This stream is one of the larger tributaries of Santa Ana River, although on account of its importance for irrigation it is generally considered as an independent stream. It rises on the western slope of the San Bernardino Mountains, draining the area immediately south of the headwaters of Santa Ana River. Mill Creek appears from its canyon about 5 miles east of Redlands. The Crafton Water Co. diverts practically all the water of this creek at the mouth of the canyon. The water passes over a weir, and the volume was therefore determined with considerable accuracy. The records have been furnished to this office by Mr. Herbert Garstine, president of the Crafton Water Co. They are particularly accurate for low-water measurements.

*Discharge measurements of Mill Creek near headworks of Crafton canal in 1896–1905.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1896. | | *Sec.-feet.* | 1902. | | *Sec.-feet.* |
| July 29 | J. H. Quinton | 14.2 | Oct. 2 | W. W. Cockins, jr | 8.6 |
| 1898. | | | 1901. | | |
| Apr. 12 | J. B. Lippincott | 15.7 | Mar. 30 | S. G. Bennett | 20 |
| 29 | .....do | 18.9 | July 6 | .....do | 23.3 |
| June 12 | .....do | 18.1 | Dec. 5 | .....do | 14.5 |
| July 23 | .....do | 11.8 | | | |
| Sept. 8 | .....do | 13.1 | 1902. | | |
| Oct. 18 | F. H. Olmsted | 15.3 | Apr. 5 | S. G. Bennett | 21 |
| Nov. 9 | .....do | 15.2 | May 31 | .....do | 19.2 |
| Dec. 8 | .....do | 12.6 | July 10 | .....do | 10.8 |
| | | | Sept. 3 | W. B. Clapp | 5.3 |
| 1899. | | | Nov. 5 | S. G. Bennett | 12.3 |
| Jan. 12 | S. G. Bennett | 10.8 | 1903. | | |
| Feb. 18 | .....do | 10.4 | | | |
| Mar. 23 | .....do | 15.6 | Apr. 1 | W. B. Clapp | 1,280 |
| May 6 | .....do | 14.6 | 24 | Clapp and Clausen | 39 |
| 31 | .....do | 11.6 | May 16 | W. B. Clapp | 68 |
| June 15 | .....do | 6.8 | June 9 | .....do | 46 |
| July 15 | .....do | 7.4 | July 1 | .....do | 29 |
| 27 | .....do | 4.3 | Sept. 1 | .....do | 22 |
| Aug. 24 | .....do | 7.2 | 1904. | | |
| 1900. | | | Sept. 21 | W. B. Clapp | 15.2 |
| Apr. 14 | S. G. Bennett | 10.8 | Nov. 11 | E. C. La Rue | 14.1 |
| May 5 | .....do | 47 | 1905. | | |
| July 13 | .....do | 8.8 | Sept. 23 | | 20 |

NOTE.—These values include the total flow at this point.

*Daily discharge, in second-feet, of Mill Creek at head of Crafton zanja, California, for 1897–1901.*

| Day | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1897. | | | | 1897. | | | | 1897. | | | |
| 1 | | 21 | 22 | 11 | | 19 | 18 | 21 | | 24 | 20 |
| 2 | | 23 | 22 | 12 | 24 | 20 | 18 | 22 | | 22 | [illegible] |
| 3 | | 24 | 22 | 13 | 24 | 20 | 18 | 23 | | 21 | 19 |
| 4 | | 24 | 21 | 14 | | 20 | 18 | 24 | | 21 | 16 |
| 5 | | 24 | 20 | 15 | | 20 | 18 | 25 | | 22 | 19 |
| 6 | | 21 | 20 | 16 | | 19 | 19 | 26 | 28 | 21 | 19 |
| 7 | | 22 | 19 | 17 | | 19 | 16 | 27 | 22 | 21 | 18 |
| 8 | | 22 | 19 | 18 | | 24 | 17 | 28 | 27 | 20 | 18 |
| 9 | | 22 | 18 | 19 | | 26 | 18 | 29 | 27 | 20 | 19 |
| 10 | | 19 | 18 | 20 | | 24 | 19 | 30 | 24 | 20 | 19 |
| | | | | | | | | 31 | 24 | 20 | |

| Day. | Oct. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1897–98. | | | | | | | | |
| 1 | 18 | | 17 | 26 | 16 | 11 | 8 | 9 |
| 2 | 18 | | 17 | 22 | 16 | 10 | 8 | [illegible] |
| 3 | 19 | | 17 | 17 | 16 | 10 | 8 | 7 |
| 4 | 19 | | 17 | 17 | 16 | 11 | 8 | 8 |
| 5 | 17 | | 17 | 16 | 16 | 11 | 8 | 8 |
| 6 | 21 | | 17 | 17 | 14 | 11 | 7 | 8 |
| 7 | 19 | | 17 | 17 | 12 | 11 | 7 | 8 |
| 8 | 19 | | 17 | 17 | 14 | 10 | 7 | 8 |
| 9 | 19 | | 17 | 17 | 14 | 10 | 7 | 8 |
| 10 | 18 | | 17 | 15 | 15 | 8 | a 10 | 8 |
| 11 | 16 | | 16 | 15 | 14 | 8 | 10 | 8 |
| 12 | 16 | | 17 | 15 | 14 | 10 | 8 | 7 |
| 13 | 15 | | 17 | 15 | 14 | 10 | 8 | 8 |
| 14 | 15 | | 18 | 15 | 13 | 10 | 7 | 8 |
| 15 | 18 | | 18 | 18 | 13 | 9 | 7 | 8 |
| 16 | 18 | | 17 | 18 | 13 | 9 | 7 | 7 |
| 17 | 18 | | 17 | 18 | 12 | 9 | 7 | 8 |
| 18 | 18 | | 17 | 18 | 15 | 8 | 7 | 8 |
| 19 | 20 | | 17 | 20 | 12 | 9 | 7 | 8 |
| 20 | 18 | | 17 | 18 | 12 | 9 | 11 | 8 |
| 21 | 18 | 17 | 17 | 17 | 13 | 9 | 25 | 8 |
| 22 | | | 17 | 16 | 12 | 9 | 17 | 8 |
| 23 | | | 17 | 16 | 13 | 9 | 14 | 8 |
| 24 | | | 17 | 18 | 12 | 8 | 10 | 8 |
| 25 | | 18 | 16 | 16 | 12 | 7 | 10 | 9 |
| 26 | | 18 | 16 | 16 | 11 | 9 | 9 | 9 |
| 27 | | 17 | 15 | 18 | 11 | 7 | 9 | 9 |
| 28 | | 17 | 16 | 18 | 11 | 7 | 13 | 9 |
| 29 | | 17 | 19 | 17 | 10 | 7 | 13 | 9 |
| 30 | | 17 | 19 | 16 | 10 | 8 | 11 | 9 |
| 31 | | 17 | | 16 | | 7 | 11 | |

a Not entire flow of creek.

*Daily discharge, in second-feet, of Mill Creek at head of Crafton zanja, California, for 1897-1901*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1898-99.** | | | | | | | | | | | | |
| 1 | 9 | 10 | 10 | 11 | 11 | 11 | 13 | 12 | 17 | 5.6 | 7.1 | 5.5 |
| 2 | 9 | 10 | 10 | 11 | 11 | 11 | 13 | 11 | 13 | 6.2 | 6.2 | 5.6 |
| 3 | 9 | 10 | 10 | 11 | 11 | 11 | 12 | 11 | 12 | 6.2 | 5.8 | 5.4 |
| 4 | 9 | 10 | 10 | 11 | 11 | 11 | 12 | 11 | 11 | 6.2 | 6.7 | 5.4 |
| 5 | 9 | 10 | 10 | 11 | 11 | 11 | 12 | 11 | 10 | 4.9 | 7.2 | 5.5 |
| 6 | 9 | 10 | 10 | 12 | 11 | 11 | 11 | 11 | 11 | 6.7 | 6.9 | 5.6 |
| 7 | 9 | 10 | 10 | 11 | 11 | 11 | 12 | 12 | 10 | 6.7 | 6.7 | 5.6 |
| 8 | 9 | 10 | 10 | 10 | 11 | 11 | 12 | 12 | 10 | 6.7 | 6.2 | 5.3 |
| 9 | 9 | 10 | 10 | 11 | 12 | 11 | 12 | 12 | 10 | 6.7 | 6.2 | 5.7 |
| 10 | 9 | 10 | 11 | ...... | 12 | ...... | 12 | 12 | 8 | 6.2 | 6.2 | 5.3 |
| 11 | 9 | 10 | 11 | ...... | 12 | 10 | 12 | 12 | 8 | 6.2 | 6.2 | 5.3 |
| 12 | 9 | 10 | 11 | ...... | 12 | 10 | 11 | 12 | 8 | 6.2 | 6.2 | 4.9 |
| 13 | 9 | 10 | 11 | ...... | ...... | 10 | 11 | 13 | 8 | 4.8 | 5.6 | 4.9 |
| 14 | 9 | 10 | 11 | ...... | 12 | 10 | 11 | 11 | 7 | 4.8 | 5.3 | 4.9 |
| 15 | 9 | 10 | 12 | ...... | 12 | 10 | 11 | 12 | 7 | 5.1 | 6.2 | 5.2 |
| 16 | 9 | 10 | 11 | ...... | 12 | 10 | 12 | 12 | 8 | 7.2 | 5.6 | 4.8 |
| 17 | 9 | 10 | 12 | ...... | ...... | 13 | 12 | 12 | 9 | 6.3 | 5.3 | 3.2 |
| 18 | 9 | 10 | 11 | ...... | 12 | 13 | 13 | 11 | 8 | 4.9 | 6.0 | 3.0 |
| 19 | 9 | 10 | 11 | ...... | 12 | 11 | 12 | 11 | 8 | 6.2 | 6.0 | 3.0 |
| 20 | 9 | 10 | 11 | ...... | 12 | 15 | 11 | 11 | 8 | 4.9 | 5.3 | 2.8 |
| 21 | 9 | 10 | 11 | ...... | ...... | 14 | 11 | 11 | 8 | 5.1 | 5.9 | 2.8 |
| 22 | 9 | 10 | 11 | ...... | 11 | 12 | 12 | 11 | 8 | 5.8 | 5.9 | 2.8 |
| 23 | 9 | 10 | 10 | ...... | 11 | 12 | 11 | 11 | 7 | 6.2 | 5.3 | 2.8 |
| 24 | 8 | 10 | 10 | ...... | 13 | 16 | 12 | 10 | 7 | 6.5 | 5.2 | 2.8 |
| 25 | 9 | 10 | 11 | ...... | 11 | 16 | 12 | 10 | 7 | 5.4 | 5.3 | 2.8 |
| 26 | 8 | 10 | 11 | ...... | 12 | 16 | 12 | 10 | 8 | 5.4 | 5.3 | 2.8 |
| 27 | 9 | 10 | 10 | ...... | 12 | 12 | 12 | 11 | 8 | 4.8 | 5.8 | 2.9 |
| 28 | 9 | 10 | 11 | ...... | 11 | 12 | 12 | 10 | 7 | 4.8 | 4.3 | 2.0 |
| 29 | 9 | 10 | 11 | ...... | ...... | 16 | 12 | 11 | 6 | 5.5 | 4.3 | 2.7 |
| 30 | 10 | 10 | 11 | ...... | ...... | 16 | 12 | 11 | 4 | 5.5 | 5.3 | 2.8 |
| 31 | 10 | ...... | 11 | ...... | ...... | 14 | ...... | 11 | ...... | 5.5 | 2.9 | ...... |
| **1899-1900.** | | | | | | | | | | | | |
| 1 | 4.8 | 7.2 | 9.8 | 9.8 | 10.2 | 9.8 | 9.0 | 13.0 | 8.2 | 5.5 | 4.9 | 5.1 |
| 2 | 5.3 | 7.2 | 9.5 | 10.0 | 10.6 | 9.8 | 9.1 | 13.0 | 8.2 | 5.5 | 4.9 | 5.5 |
| 3 | 5.3 | 6.8 | 9.4 | ...... | 10.0 | 9.8 | 10.0 | 12.1 | 7.6 | 5.6 | 5.1 | 5.5 |
| 4 | 4.3 | 6.8 | 8.8 | ...... | 10.2 | 11.9 | 9.8 | 12.1 | 7.8 | 5.6 | 5.7 | 5.7 |
| 5 | 4.6 | 7.2 | 8.0 | ...... | 10.6 | 10.2 | 9.2 | ...... | 8.0 | 6.3 | 5.7 | 5.5 |
| 6 | 6.3 | 7.2 | 7.8 | ...... | 10.6 | 10.2 | 9.3 | ...... | 8.0 | 6.3 | 5.5 | 5.5 |
| 7 | 5.6 | 7.2 | 8.0 | ...... | 10.6 | 10.2 | 9.8 | 15.5 | 8.0 | 5.1 | 5.5 | 5.0 |
| 8 | 4.8 | 7.2 | 5.3 | ...... | 10.2 | 10.2 | 9.8 | 14.6 | 8.0 | 4.3 | 5.5 | 5.0 |
| 9 | 5.6 | 6.1 | 9.0 | ...... | 10.6 | 10.2 | 9.7 | 16.4 | 8.0 | 4.3 | 5.1 | 5.0 |
| 10 | 5.2 | 6.1 | 8.8 | ...... | 10.2 | 9.8 | 8.9 | 17.0 | 8.0 | 4.5 | 5.1 | 5.5 |
| 11 | 5.7 | 6.8 | 9.0 | ...... | 10.2 | 9.8 | 8.9 | ...... | 8.0 | 4.5 | 5.4 | 5.5 |
| 12 | 6.1 | 6.8 | 8.2 | ...... | 10.2 | 9.6 | 9.3 | ...... | 8.0 | 5.5 | 5.5 | 5.5 |
| 13 | 6.2 | 6.4 | 9.8 | ...... | 10.0 | 9.6 | 9.3 | ...... | 8.2 | 5.5 | 5.5 | 5.5 |
| 14 | 8.5 | 11.2 | 9.6 | ...... | 10.0 | 9.8 | 8.9 | ...... | 8.0 | 5.5 | 5.5 | 5.5 |
| 15 | 7.8 | 11.2 | 9.6 | ...... | 10.0 | 9.8 | 8.9 | ...... | 8.0 | 5.5 | 5.5 | 4.5 |
| 16 | 7.8 | 9.8 | 7.8 | ...... | 10.0 | 9.8 | 9.8 | 12.0 | 8.2 | 4.5 | 5.5 | 4.5 |
| 17 | 7.8 | 9.8 | 14.6 | ...... | 10.0 | 9.8 | 8.9 | 12.0 | 7.2 | 3.8 | 5.5 | 4.3 |
| 18 | 7.2 | 9.8 | 13.0 | 9.8 | 10.0 | 9.8 | 8.9 | 12.0 | 4.8 | 3.3 | 5.5 | 5.1 |
| 19 | 7.8 | 9.8 | 12.6 | 10.0 | 10.2 | 9.8 | 8.9 | 13.0 | 6.8 | 4.4 | 5.5 | 4.5 |
| 20 | 7.2 | 9.7 | 9.8 | 10.0 | 10.2 | 9.8 | 8.9 | 12.0 | 7.6 | 4.0 | 5.5 | 4.1 |
| 21 | 7.2 | 9.7 | 9.4 | 10.6 | 10.2 | 10.2 | 10.2 | 12.0 | 7.6 | 5.4 | 5.5 | 5.1 |
| 22 | 7.2 | 9.6 | 11.0 | 10.4 | 10.2 | 10.2 | 13.3 | 10.1 | 6.5 | 5.4 | 5.5 | 5.1 |
| 23 | 7.8 | 9.7 | 9.6 | 10.6 | 10.2 | 13.2 | 10.8 | 12.0 | 6.5 | 4.8 | 4.9 | 4.9 |
| 24 | 6.6 | 9.8 | 9.8 | 10.6 | 10.2 | 10.6 | 10.8 | 10.1 | ...... | 5.0 | 5.5 | 5.3 |
| 25 | 6.6 | 10.4 | 9.8 | 10.6 | 10.2 | 9.8 | 10.2 | 10.1 | ...... | 5.0 | 4.9 | 5.3 |
| 26 | 7.8 | 10.0 | 10.0 | 10.4 | 10.2 | 10.2 | 10.2 | 9.9 | ...... | 5.0 | 4.9 | 5.3 |
| 27 | 7.2 | 9.8 | 10.0 | 10.4 | 9.8 | 10.2 | 10.2 | 9.9 | ...... | 5.0 | 4.3 | 4.9 |
| 28 | 7.2 | 9.8 | 8.5 | 10.4 | 9.8 | 11.6 | 10.8 | 8.4 | 5.4 | 5.0 | 4.3 | 4.9 |
| 29 | 7.2 | 9.8 | 9.4 | 10.4 | ...... | 10.2 | 13.0 | 8.6 | 5.4 | 5.0 | 4.3 | 4.9 |
| 30 | 7.2 | 9.8 | 9.8 | 10.6 | ...... | 9.8 | 13.0 | 8.6 | 5.3 | 4.7 | 5.1 | 4.9 |
| 31 | 7.2 | ...... | 10.0 | 10.2 | ...... | 9.8 | ...... | 8.2 | ...... | 4.7 | 5.1 | ...... |

*Daily discharge, in second-feet, of Mill Creek at head of Crafton zanja, California, for 1897–1901—Continued.*

| Day. | Oct. | Nov. | June. | July. | Aug. | Sept. | Day. | Oct. | Nov. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900-01. | | | | | | | 1900-01. | | | | | | |
| 1 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 14.00 | 16 | 5.4 | 8.5 | ...... | 15.04 | (a) | 13.15 |
| 2 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | 17 | 5.2 | 7.5 | ...... | 15.04 | ...... | 13.15 |
| 3 | [illegible] | [illegible] | ...... | [illegible] | 32.00 | 15.00 | 18 | 5.0 | ...... | ...... | 15.04 | ...... | 12.30 |
| 4 | [illegible] | [illegible] | ...... | [illegible] | 32.30 | 15.55 | 19 | 5.0 | ...... | 20.08 | 14.40 | ...... | 12.30 |
| 5 | [illegible] | [illegible] | ...... | [illegible] | 32.00 | [illegible] | 20 | 5.0 | ...... | 20.08 | 12.94 | ...... | 12.30 |
| 6 | [illegible] | [illegible] | ...... | [illegible] | 19.10 | 16.58 | 21 | 4.1 | ...... | 21.00 | 14.40 | ...... | 11.42 |
| 7 | [illegible] | [illegible] | ...... | [illegible] | 19.20 | 15.58 | 22 | 4.6 | ...... | 20.90 | 14.40 | ...... | 11.42 |
| 8 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 15.00 | 23 | 5.2 | ...... | 20.40 | 13.94 | ...... | 12.30 |
| 9 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 15.60 | 24 | 5.2 | ...... | 20.08 | 13.94 | 16.00 | 12.30 |
| 10 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 14.04 | 25 | 5.2 | ...... | 20.08 | 14.40 | 16.00 | 14.56 |
| 11 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 14.00 | 26 | 5.2 | ...... | 20.00 | 14.40 | 15.04 | 13.15 |
| 12 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 14.00 | 27 | 5.2 | ...... | 19.80 | 16.96 | 15.04 | 13.15 |
| 13 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 14.00 | 28 | 5.2 | ...... | 19.90 | 15.04 | 15.04 | 13.15 |
| 14 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | 29 | 5.2 | ...... | 19.50 | 15.04 | 16.00 | 13.15 |
| 15 | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | 30 | 5.2 | ...... | 19.40 | 15.04 | 16.00 | 13.15 |
| | | | | | | | 31 | 5.1 | ...... | ...... | 15.04 | 16.00 | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1901. | | | | 1901. | | | | 1901. | | | |
| 1 | [illegible] | [illegible] | [illegible] | 11 | 12.64 | 12.30 | 12.10 | 21 | 12.30 | 12.30 | 12.10 |
| 2 | [illegible] | [illegible] | [illegible] | 12 | 12.64 | 12.30 | 12.10 | 22 | 12.30 | 12.30 | 12.10 |
| 3 | [illegible] | [illegible] | [illegible] | 13 | 12.30 | 12.30 | 12.10 | 23 | 12.30 | 12.30 | 12.10 |
| 4 | [illegible] | [illegible] | [illegible] | 14 | 12.30 | 12.30 | 12.10 | 24 | 12.30 | 12.30 | 12.10 |
| 5 | [illegible] | 12.30 | [illegible] | 15 | 12.30 | 12.30 | 12.10 | 25 | 12.30 | 12.30 | 12.10 |
| 6 | [illegible] | [illegible] | [illegible] | 16 | 12.30 | 12.30 | 12.10 | 26 | 12.30 | 12.30 | 12.10 |
| 7 | [illegible] | [illegible] | [illegible] | 17 | 12.30 | 12.30 | 12.10 | 27 | 12.30 | 12.30 | 12.10 |
| 8 | [illegible] | [illegible] | [illegible] | 18 | 12.30 | 12.30 | 12.10 | 28 | 12.30 | 12.30 | 12.10 |
| 9 | [illegible] | [illegible] | [illegible] | 19 | 12.30 | 12.30 | 12.10 | 29 | 12.30 | 12.30 | 12.10 |
| 10 | 12.64 | [illegible] | [illegible] | 20 | 12.30 | 12.30 | 12.10 | 30 | 12.30 | 11.60 | 12.10 |
| | | | | | | | | 31 | 12.30 | ...... | 12.10 |

a On Aug. 16 a cloudburst in Mill Creek canyon and Crafton Hills filled zanja and supply canal with sand.

*Daily discharge, in second-feet, of water pumped from Mill Creek at Crafton headworks, California, for 1900.*

| Day. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ...... | 1.7 | 2.0 | 2.2 | 3.5 | 2.9 | 2.9 | 2.9 | 2.9 |
| 2 | ...... | 1.7 | 2.0 | 2.2 | 3.5 | 2.9 | 2.9 | 2.9 | 2.9 |
| 3 | ...... | 1.7 | 2.0 | 2.2 | 3.5 | 2.9 | 2.9 | 2.9 | 2.9 |
| 4 | ...... | 1.7 | 2.0 | 2.2 | 3.5 | 2.9 | 2.9 | 2.9 | 2.9 |
| 5 | ...... | 1.7 | ...... | 2.2 | 3.5 | 2.9 | 2.9 | 2.9 | 2.9 |
| 6 | ...... | 1.7 | ...... | 2.2 | 3.5 | 2.9 | 2.9 | 2.9 | 2.9 |
| 7 | ...... | 1.7 | ...... | 2.2 | 3.5 | 2.9 | 2.9 | 2.9 | 2.9 |
| 8 | ...... | 1.7 | ...... | 2.2 | 3.5 | [illegible] | 2.9 | 2.9 | 2.9 |
| 9 | ...... | 1.7 | ...... | 2.2 | 3.5 | 2.9 | 2.9 | 2.9 | 2.9 |
| 10 | ...... | 1.7 | ...... | 2.2 | 3.3 | 2.9 | 2.9 | 2.8 | 2.9 |
| 11 | ...... | 1.7 | 2.2 | 2.2 | 3.3 | 2.9 | 2.9 | 2.8 | 2.9 |
| 12 | ...... | 1.7 | ...... | 2.2 | 3.5 | 2.9 | 2.9 | 2.8 | 2.9 |
| 13 | ...... | 1.7 | ...... | 2.2 | 3.5 | 2.9 | 2.9 | 2.8 | 2.9 |
| 14 | ...... | 1.7 | ...... | 2.2 | 3.5 | 2.9 | 2.9 | 2.8 | 2.9 |
| 15 | ...... | 1.7 | ...... | 2.2 | 3.5 | 2.9 | 2.9 | 2.8 | 2.9 |
| 16 | ...... | 1.7 | 2.2 | 2.2 | 3.3 | 2.9 | 2.9 | 2.8 | 2.9 |
| 17 | ...... | 1.7 | 2.2 | 2.2 | 3.2 | 2.9 | 2.9 | 2.8 | 2.9 |
| 18 | ...... | 1.7 | 2.2 | 2.2 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 19 | ...... | 1.7 | 2.2 | 2.2 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 20 | ...... | 1.7 | ...... | 2.2 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 21 | ...... | 1.7 | 2.2 | 3.7 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 22 | ...... | 1.7 | 2.2 | 3.7 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 23 | ...... | 1.7 | 2.2 | 3.7 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 24 | ...... | 1.7 | 2.2 | 3.7 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 25 | ...... | 1.7 | 2.2 | 3.7 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 26 | ...... | 1.7 | 2.2 | 3.7 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 27 | ...... | ...... | 2.2 | 3.7 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 28 | 1.0 | ...... | 2.2 | 3.7 | 3.2 | 2.9 | 2.2 | 2.8 | ...... |
| 29 | 1.5 | ...... | 2.2 | 3.7 | 3.2 | 2.9 | 2.9 | 2.8 | ...... |
| 30 | 1.7 | ...... | 2.2 | 3.7 | 3.3 | 2.9 | 2.9 | 2.9 | ...... |
| 31 | 1.7 | ...... | 2.2 | ...... | 3.3 | 2.9 | ...... | 2.9 | ...... |

NOTE.—No record from Nov. 17 to Dec. 31.

*Monthly discharge of Mill Creek canals at Crafton headworks, California, for 1895–96 and 1899–1901.*

[Drainage area, 47 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1895.** | | | | | | |
| August | 27.6 | 24.0 | 24.5 | 0.52 | 0.60 | 1,506 |
| September | 26.5 | 19.5 | 20.0 | .47 | .52 | 1,310 |
| **1895–96.** | | | | | | |
| October | 24.5 | 17.0 | 19.6 | .42 | .48 | 1,205 |
| May | 21.4 | 9.4 | 13.4 | .28 | .33 | 825 |
| June | 16 | 5.1 | 10.3 | .22 | .25 | 615 |
| July | 16 | 6.1 | 11.5 | .24 | .28 | 709 |
| August | 13.2 | 8.7 | 11.6 | .25 | .28 | 716 |
| September | 15 | 7.4 | 11.5 | .24 | .27 | 687 |
| **1896.** | | | | | | |
| October | 13.1 | 9.0 | 10.5 | .22 | .26 | 637 |
| **1899.** | | | | | | |
| February | 13 | 11 | 11.6 | .25 | .26 | 644 |
| March | 16 | 10 | 12.2 | .26 | .30 | 750 |
| April | 13 | 11 | 11.8 | .25 | .28 | 702 |
| May | 12 | 10 | 11.2 | .23 | .26 | 689 |
| June | 17 | 4 | 8.7 | .19 | .21 | 518 |
| July | 7.2 | 4.8 | 5.8 | .12 | .14 | 357 |
| August | 7.2 | 2.9 | 5.8 | .12 | .14 | 357 |
| September | 5.7 | 2.0 | 4.1 | .09 | .10 | 244 |
| The period | | | | | | 4,260 |
| **1899–1900.** | | | | | | |
| October | 8.5 | 4.3 | 6.5 | .14 | .16 | 400 |
| November | 11.2 | 6.1 | 8.6 | .18 | .20 | 512 |
| December | 14.6 | 5.3 | 9.5 | .20 | .23 | 584 |
| January (16 days) | 10.6 | 9.8 | 10 | .22 | .13 | 317 |
| February | 10.6 | 9.8 | 10 | .22 | .23 | 555 |
| March | 13.2 | 9.6 | 10 | .22 | .25 | 615 |
| April | 13.3 | 8.9 | 10 | .22 | .25 | 595 |
| May | 17.0 | 8.2 | 12 | .27 | .31 | 738 |
| June | 8.2 | 5.3 | 7 | .16 | .18 | 417 |
| July | 6.3 | 3.3 | 5 | .11 | .13 | 307 |
| August | 5.7 | 4.3 | 5 | .11 | .13 | 307 |
| September | 5.7 | 4.3 | 5 | .11 | .12 | 298 |
| The year | 17.0 | 3.3 | 8.22 | .175 | 2.32 | 5,640 |
| **1900–1901.** | | | | | | |
| October | 5.8 | 3.8 | 5 | .11 | .13 | 307 |
| November 1–17 | 8.5 | 5.1 | 5 | .11 | .07 | 169 |
| July | 19.12 | 13.94 | 15.86 | .34 | .39 | 975 |
| August[a] | | | 19.07 | .41 | .35 | 867 |
| September | 16.58 | 11.42 | 14.04 | .30 | .33 | 833 |
| **1901.** | | | | | | |
| October | 13.18 | 12.30 | 12.58 | .27 | .31 | 774 |
| November | 12.30 | 11.60 | 12.28 | .26 | .29 | 732 |
| December | 12.28 | 10.26 | 12.00 | .26 | .30 | 738 |

[a] Partial month.

## MILL CREEK AT FOREST HOME,[1] CAL.

This station is located at Forest Home, in the NW. ¼ NE. ¼ sec. 13, T. 1 S., R. 1 W., about 2½ miles below Falls Creek, 4 miles above Mountain Home Creek, and 14 miles east of Redlands.

The discharge is obtained by combining the flow in the power canal with the flow over the diverting dam. Current meters measurements are made in the flume of the power canal. The flow over the diverting dam is approximate. The daily discharge is the mean of two observations secured each day. No record is given when the flow exceeds 100 second-feet. When the entire flow is diverted into the canal the results are good; at higher stages they are approximate.

The following records of daily discharge were furnished by the Southern California Edison Co., through H. W. Dennis, construction engineer.

*Daily discharge, in second-feet, of Mill Creek at Forest Home, Cal., for 1903–1911.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1903–4.** | | | | | | | | | | | | | |
| 1 | | 19 | 12 | 11 | 10 | 9.2 | 11 | 14 | 17 | 15 | 11 | 11 | 9.8 |
| 2 | | 17 | 12 | 11 | 10 | 9.2 | 10 | 14 | 17 | 14 | 11 | 11 | 9.6 |
| 3 | | 16 | 12 | 11 | 10 | 9.2 | 10 | (a) | 16 | 14 | 11 | 11 | 9.6 |
| 4 | | 16 | 12 | 11 | 10 | 8.9 | 9.8 | 18 | 16 | 14 | 11 | 12 | 9.6 |
| 5 | | 16 | 12 | 11 | 9.1 | 9.2 | 9.5 | 18 | 16 | 14 | 11 | 11 | 9.5 |
| 6 | | 15 | 12 | 11 | 9.7 | 10 | 9.6 | 21 | 16 | 14 | 10 | (b) | 9.7 |
| 7 | | 14 | 12 | 11 | 9.7 | 9.2 | 9.5 | 20 | 16 | 14 | 10 | 11 | 9.4 |
| 8 | | 15 | 11 | 11 | 9.6 | 9.0 | 9.5 | 21 | 16 | 14 | 10 | 10 | 9.4 |
| 9 | | 15 | 12 | 11 | 9.6 | 9.1 | 9.4 | 20 | 16 | 13 | 10 | 10 | 9.6 |
| 10 | | 14 | 12 | 11 | 9.6 | 9.2 | 11 | 20 | 16 | 13 | 10 | 10 | 9.7 |
| 11 | | 14 | 12 | 11 | 9.6 | 9.1 | 11 | 20 | 16 | 13 | 10 | 10 | 9.9 |
| 12 | | 14 | 12 | 11 | 9.4 | 9.1 | 10 | 20 | 16 | 13 | 9.9 | 11 | 11 |
| 13 | | 14 | 11 | 11 | 9.4 | 9.1 | 10 | 20 | 16 | 13 | 9.9 | 11 | 9.2 |
| 14 | | 14 | 11 | 11 | 9.4 | 9.1 | 11 | 20 | 16 | 13 | 9.8 | 11 | 8.8 |
| 15 | | 14 | 11 | 11 | 9.4 | 9.0 | 11 | 18 | 16 | 13 | 9.7 | 11 | 8.7 |
| 16 | | 13 | 11 | 11 | 9.4 | 14 | 11 | 17 | 16 | 12 | 9.7 | 12 | 8.8 |
| 17 | | 13 | 11 | 10 | 9.4 | 11 | 10 | 16 | 15 | 12 | 9.6 | 10 | 8.7 |
| 18 | | 13 | 11 | 10 | 9.5 | 10 | 10 | 16 | 15 | 12 | 9.6 | 10 | 8.7 |
| 19 | | 13 | 11 | 10 | 9.3 | 9.6 | 10 | 18 | 15 | 14 | 9.5 | 10 | 8.7 |
| 20 | | 13 | 11 | 10 | 9.0 | 9.2 | 26 | 18 | 15 | 11 | 9.4 | 10 | 8.7 |
| 21 | | 13 | 11 | 10 | 9.4 | 9.2 | 11 | 18 | 15 | 12 | 9.4 | 10 | 8.7 |
| 22 | | 13 | 11 | 10 | 9.5 | 9.3 | 11 | 17 | 15 | 12 | 9.4 | 11 | 8.7 |
| 23 | 13 | 12 | 11 | 10 | 9.4 | 9.2 | 50 | 26 | 15 | 12 | 9.3 | 10 | 8.7 |
| 24 | 13 | 12 | 11 | 10 | 9.5 | 9.1 | 13 | 16 | 16 | 12 | 9.0 | 10 | 8.6 |
| 25 | 18 | 12 | 11 | 10 | 9.4 | 9.2 | 12 | 17 | 16 | 12 | 10 | 11 | 8.6 |
| 26 | 14 | 12 | 11 | 10 | 9.4 | 9.3 | 15 | 17 | 16 | 12 | 12 | 11 | 8.6 |
| 27 | 17 | 12 | 11 | 10 | 9.4 | 9.2 | 17 | 17 | 15 | 11 | 12 | 11 | 8.5 |
| 28 | 17 | 12 | 11 | 10 | 9.4 | 14 | 18 | 16 | 15 | 11 | 11 | 10 | 8.5 |
| 29 | 17 | 12 | 11 | 10 | 9.4 | 13 | 45 | 15 | 15 | 11 | 11 | 10 | 8.5 |
| 30 | 16 | 12 | 11 | 10 | 9.4 | ...... | 19 | 16 | 15 | 11 | 11 | 10 | 8.4 |
| 31 | ...... | 12 | ...... | 10 | 9.3 | ...... | 14 | ...... | 15 | ...... | 11 | 9.8 | ...... |

a No record reported. b Discharge over 100 second-feet at time of one daily observation.

[1] Akers Camp on map of San Gorgonio quadrangle, U. S. Geological Survey.

*Daily discharge, in second-feet, of Mill Creek at Forest Home, Cal., for 1904–1912—Contd.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | ....... | [illegible] | [illegible] | ....... | 24 | .... | [illegible] | .. | [illegible] | [illegible] | |
| 1905–6. | | | | | | | | | | | | |
| 1 | 16 | 15 | 25 | 14 | 13 | 14 | 40 | 40 | 40 | [illegible] | [illegible] | [illegible] |
| 2 | 16 | 15 | 15 | 14 | 13 | 15 | 42 | 40 | 40 | [illegible] | [illegible] | [illegible] |
| 3 | 16 | 15 | 15 | 14 | 13 | 15 | 45 | 40 | 40 | [illegible] | [illegible] | [illegible] |
| 4 | 16 | 15 | 15 | 14 | 13 | 18 | 42 | 40 | 40 | [illegible] | [illegible] | [illegible] |
| 5 | 16 | 15 | 15 | 13 | 14 | 15 | 30 | 40 | 40 | [illegible] | [illegible] | [illegible] |
| 6 | 16 | 15 | 15 | 13 | 14 | 16 | 30 | 40 | 40 | 40 | [illegible] | [illegible] |
| 7 | 16 | 21 | 15 | 13 | 13 | 16 | 30 | 45 | 40 | 40 | [illegible] | [illegible] |
| 8 | 16 | 30 | 15 | 13 | 18 | 16 | 30 | 46 | 40 | 40 | [illegible] | [illegible] |
| 9 | 16 | 19 | 15 | 13 | 13 | 15 | 35 | 46 | 40 | 40 | [illegible] | [illegible] |
| 10 | 17 | 18 | 15 | 13 | 14 | 15 | 30 | 46 | 42 | 40 | [illegible] | [illegible] |
| 11 | 16 | 16 | 15 | 13 | 14 | 15 | 35 | 46 | 42 | 40 | [illegible] | [illegible] |
| 12 | 16 | 15 | 15 | 13 | 14 | ...... | 30 | 40 | 40 | 40 | [illegible] | [illegible] |
| 13 | 16 | 15 | 15 | 13 | 14 | 60 | 30 | 40 | 40 | [illegible] | [illegible] | [illegible] |
| 14 | 16 | 15 | 15 | 14 | 14 | 38 | 30 | 40 | 40 | 40 | [illegible] | [illegible] |
| 15 | 16 | 18 | 14 | 14 | 18 | 32 | 30 | 40 | 40 | 40 | [illegible] | [illegible] |
| 16 | 16 | 15 | 15 | 13 | 20 | (a) | 35 | 40 | 40 | 30 | [illegible] | [illegible] |
| 17 | 16 | 18 | 15 | 13 | 15 | (a) | 35 | 40 | 40 | [illegible] | [illegible] | [illegible] |
| 18 | 16 | 15 | 15 | 13 | 15 | 40 | 35 | 40 | 40 | 40 | [illegible] | [illegible] |
| 19 | 16 | 15 | 14 | 24 | 14 | 37 | 35 | 45 | 38 | 30 | [illegible] | [illegible] |
| 20 | 16 | 18 | 14 | 18 | 15 | 34 | 33 | 45 | 37 | 30 | [illegible] | [illegible] |
| 21 | 15 | 15 | 17 | 14 | 16 | 34 | 33 | 45 | 37 | 40 | [illegible] | 37 |
| 22 | 15 | 15 | 14 | 14 | 15 | 31 | 35 | 45 | 30 | 40 | [illegible] | 36 |
| 23 | 16 | 15 | 14 | 13 | 15 | 30 | 35 | 45 | 35 | 30 | [illegible] | 34 |
| 24 | 15 | 15 | 14 | 17 | 14 | ..... | 33 | 40 | 39 | 30 | [illegible] | 34 |
| 25 | 15 | 15 | 14 | 14 | 14 | ..... | 33 | 40 | 35 | 30 | [illegible] | 34 |
| 26 | 15 | 15 | 14 | 14 | 14 | ..... | 35 | 45 | 35 | 30 | [illegible] | 34 |
| 27 | 14 | 19 | 14 | 14 | 14 | (a) | 30 | 45 | 37 | 30 | [illegible] | 34 |
| 28 | 15 | 16 | 14 | 14 | 15 | 50 | 40 | | 35 | 30 | [illegible] | 34 |
| 29 | 14 | 16 | 14 | 13 | ...... | 45 | 40 | (a) | 34 | 30 | [illegible] | 34 |
| 30 | 15 | 15 | 14 | 13 | ....... | 38 | 40 | 63 | 32 | 30 | [illegible] | 34 |
| 31 | 15 | ....... | 14 | 13 | ....... | 30 | ....... | 53 | ...... | 30 | [illegible] | .... |

a Discharge over 100 second-feet at time of one daily observation.
b No record reported.

*Daily discharge, in second-feet, of Mill Creek at Forest Home, Cal., for 1905-1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 30 | [illegible] | 30 | 35 | 30 | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 30 | [illegible] | 40 | 35 | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 30 | [illegible] | 45 | 35 | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | 28 | 40 | 30 | [illegible] | 45 | 35 | 30 | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | 25 | 45 | 30 | [illegible] | 45 | 35 | [illegible] | [illegible] |
| 6 | (a) | [illegible] | [illegible] | [illegible] | 25 | 30 | [illegible] | 70 | 45 | 35 | 30 | [illegible] |
| 7 | (a) | 30 | [illegible] | [illegible] | 25 | 30 | 40 | (b) | 45 | 35 | [illegible] | [illegible] |
| 8 | (a) | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 40 | 70 | 45 | 34 | [illegible] | [illegible] |
| 9 | [illegible] | 19 | [illegible] | [illegible] | 30 | 30 | 45 | 45 | 45 | 34 | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 30 | 70 | 70 | 45 | 34 | [illegible] | [illegible] |
| 11 | [illegible] | 19 | [illegible] | [illegible] | 30 | 30 | 70 | 40 | 45 | 34 | 30 | [illegible] |
| 12 | [illegible] | 19 | [illegible] | [illegible] | 30 | 30 | 70 | 70 | 40 | 34 | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | 19 | [illegible] | 30 | 30 | 70 | 70 | 40 | 34 | 30 | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 30 | 70 | 70 | 40 | 34 | 30 | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 30 | 70 | 70 | [illegible] | 34 | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 30 | 70 | 70 | 40 | 34 | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | 45 | 30 | 70 | 70 | 30 | 34 | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 30 | 70 | 45 | 40 | 34 | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | 30 | 30 | (b) | [illegible] | 40 | 34 | [illegible] | [illegible] |
| 20 | [illegible] | 16 | [illegible] | 25 | 30 | (b) | [illegible] | [illegible] | 40 | 34 | [illegible] | [illegible] |
| 21 | 30 | 16 | [illegible] | [illegible] | 30 | (b) | [illegible] | 30 | 30 | 34 | 30 | [illegible] |
| 22 | 30 | 16 | [illegible] | [illegible] | 30 | (b) | [illegible] | 30 | 34 | 34 | 30 | [illegible] |
| 23 | 30 | 16 | [illegible] | [illegible] | 30 | 60 | [illegible] | 30 | [illegible] | 34 | 30 | [illegible] |
| 24 | 30 | 16 | [illegible] | [illegible] | 30 | 60 | [illegible] | 30 | [illegible] | 30 | [illegible] | [illegible] |
| 25 | 30 | 16 | 24 | [illegible] | 30 | 60 | [illegible] | 45 | [illegible] | 30 | [illegible] | [illegible] |
| 26 | 30 | 16 | 23 | [illegible] | 30 | [illegible] | [illegible] | 30 | [illegible] | 30 | 30 | [illegible] |
| 27 | 30 | 16 | 35 | [illegible] | 30 | [illegible] | [illegible] | 30 | 40 | 30 | 30 | [illegible] |
| 28 | 30 | 16 | (b) | [illegible] | 30 | [illegible] | [illegible] | 30 | 40 | 30 | 30 | [illegible] |
| 29 | 30 | 16 | [illegible] | [illegible] | ........ | [illegible] | [illegible] | 30 | 40 | 30 | 30 | [illegible] |
| 30 | 30 | 16 | 30 | 24 | ........ | 30 | [illegible] | 30 | 40 | 30 | 30 | [illegible] |
| 31 | 30 | ........ | 30 | 23 | ........ | 30 | ........ | 30 | ........ | 30 | 30 | ........ |
| 1907-8. | | | | | | | | | | | | |
| 1 | 22 | 23 | 18 | 17 | 15 | 30 | 32 | 40 | 40 | 22 | 25 | 14 |
| 2 | 22 | 22 | 18 | 17 | 16 | 28 | 32 | 40 | 40 | 21 | 24 | 14 |
| 3 | 22 | 22 | 18 | 17 | 19 | 17 | 32 | 40 | 40 | 21 | 15 | [illegible] |
| 4 | 22 | 21 | 18 | 17 | 18 | 16 | 32 | 40 | 38 | 21 | 17 | [illegible] |
| 5 | 22 | 21 | 19 | 17 | 16 | 17 | 32 | 40 | 36 | 20 | [illegible] | 14 |
| 6 | 22 | 21 | 18 | 16 | 16 | 20 | 32 | 40 | 40 | 19 | 25 | 14 |
| 7 | 22 | 22 | 18 | 16 | 15 | 16 | 32 | 40 | 40 | 18 | 20 | [illegible] |
| 8 | 22 | 21 | 18 | 16 | 15 | 16 | 32 | 40 | 36 | 20 | 15 | 14 |
| 9 | 22 | 21 | 18 | 16 | 15 | 17 | 32 | 40 | 36 | 20 | [illegible] | [illegible] |
| 10 | 22 | 21 | 18 | 16 | 15 | 18 | 32 | 40 | 36 | 20 | 20 | [illegible] |
| 11 | 22 | 20 | 18 | 15 | 15 | 30 | 32 | 40 | 34 | 19 | 16 | 14 |
| 12 | 22 | 30 | 18 | 14 | 15 | 21 | 33 | 40 | 32 | 19 | 16 | 14 |
| 13 | 22 | 30 | 18 | 14 | 15 | 32 | 34 | 40 | 32 | 19 | [illegible] | 14 |
| 14 | 22 | 20 | 18 | 16 | 16 | 35 | 34 | 40 | 31 | 19 | 16 | [illegible] |
| 15 | 22 | 20 | 18 | 15 | 16 | 25 | 34 | 40 | 35 | 19 | 15 | [illegible] |
| 16 | 22 | 20 | 18 | 15 | 17 | 20 | 34 | 40 | 30 | 25 | 16 | [illegible] |
| 17 | 23 | 20 | 18 | 14 | 16 | 32 | 34 | 40 | 30 | 21 | 16 | [illegible] |
| 18 | 22 | 19 | 18 | 14 | 17 | 32 | 34 | 40 | 29 | 20 | 19 | [illegible] |
| 19 | 22 | 19 | 18 | 14 | 16 | 32 | 36 | 40 | 25 | 16 | 17 | [illegible] |
| 20 | 22 | 19 | 18 | 24 | 16 | 32 | 34 | 40 | 25 | 20 | 14 | [illegible] |
| 21 | 22 | 19 | 18 | 14 | 16 | 32 | 34 | 40 | 25 | 19 | 14 | [illegible] |
| 22 | 23 | 19 | 18 | 14 | 16 | 32 | 34 | 40 | 27 | 19 | 14 | [illegible] |
| 23 | 45 | 19 | 18 | 15 | 16 | 32 | 34 | 40 | 25 | 20 | 14 | [illegible] |
| 24 | 22 | 19 | 15 | 20 | 16 | 32 | 37 | 40 | 24 | 20 | 14 | [illegible] |
| 25 | 22 | 18 | 17 | 15 | 14 | 32 | 40 | 40 | 22 | 19 | 14 | 14 |
| 26 | 22 | 18 | 17 | 17 | 28 | 32 | 40 | 40 | 22 | 19 | 15 | [illegible] |
| 27 | 22 | 18 | 17 | 15 | 22 | 31 | 40 | 40 | 22 | 19 | 15 | [illegible] |
| 28 | 22 | 18 | 17 | 16 | 22 | 32 | 40 | 40 | 22 | 19 | 15 | [illegible] |
| 29 | 22 | 18 | 17 | 16 | 21 | 32 | 40 | 40 | 22 | 18 | 15 | [illegible] |
| 30 | 22 | 18 | 17 | 16 | ........ | 32 | 40 | 40 | 22 | 18 | 15 | [illegible] |
| 31 | 22 | ........ | 17 | 16 | ........ | 32 | ........ | 40 | ........ | 18 | 14 | ........ |

a No record reported.
b Discharge over 100 second-feet at time of one daily observation.

*Daily discharge, in second-feet, of Mill Creek at Forest Home, Cal., for 1903–1911*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1908–9.** | | | | | | | | | | | | |
| 1 | 12 | 12 | 11 | 12 | 15 | 23 | 29 | 42 | 40 | 29 | 24 | 22 |
| 2 | 12 | 12 | 12 | 12 | 16 | 24 | 30 | 45 | 40 | 29 | 24 | 20 |
| 3 | 12 | 12 | 15 | 11 | 18 | 24 | 43 | 48 | 39 | 29 | 24 | 20 |
| 4 | 12 | 12 | 13 | 11 | 18 | 24 | 32 | 50 | 39 | 28 | 24 | 20 |
| 5 | 13 | 12 | 12 | 11 | 17 | 23 | 30 | 50 | 39 | 28 | 24 | 21 |
| 6 | 12 | 12 | 12 | 11 | 18 | 27 | 29 | 50 | 38 | 28 | 24 | 20 |
| 7 | 12 | 12 | 12 | 11 | 25 | 28 | 28 | 50 | 38 | 28 | 24 | 20 |
| 8 | 12 | 12 | 11 | 11 | 18 | 28 | 28 | 50 | 38 | 28 | 23 | 25 |
| 9 | 12 | 12 | 11 | 20 | 29 | 28 | 29 | 50 | 38 | 28 | 23 | 20 |
| 10 | 12 | 12 | 11 | 11 | 18 | 28 | 29 | 50 | 38 | 28 | 22 | 20 |
| 11 | 12 | 11 | 11 | 12 | 24 | 28 | 31 | 50 | 34 | 28 | 22 | 20 |
| 12 | 12 | 11 | 11 | 14 | 25 | 28 | 32 | 47 | 34 | 27 | 22 | 20 |
| 13 | 12 | 11 | 11 | 38 | 22 | 28 | 32 | 47 | 34 | 27 | 22 | 20 |
| 14 | 12 | 11 | 11 | 45 | 22 | 28 | 35 | 47 | 34 | 27 | 24 | 20 |
| 15 | 12 | 11 | 11 | 17 | 20 | 28 | 36 | 44 | 34 | 28 | (a) | 20 |
| 16 | 12 | 12 | 11 | 13 | 21 | 28 | 36 | 44 | 34 | 26 | (a) | 20 |
| 17 | 12 | 11 | 11 | 12 | 24 | 28 | 36 | 44 | 33 | 26 | (a) | 19 |
| 18 | 12 | 11 | 11 | 12 | 24 | 28 | 36 | 44 | 33 | 26 | 29 | 19 |
| 19 | 12 | 11 | 11 | 12 | 24 | 28 | 36 | 44 | 32 | 26 | 26 | 19 |
| 20 | 12 | 11 | 11 | 12 | 24 | 28 | 36 | 44 | 32 | 25 | 22 | 19 |
| 21 | 13 | 11 | 12 | (a) | 24 | 28 | 36 | 44 | 32 | 25 | 23 | 19 |
| 22 | 17 | 11 | 12 | ...... | 24 | 28 | 36 | 44 | 32 | 25 | 23 | 19 |
| 23 | 20 | 16 | 12 | 45 | 24 | 28 | 36 | 44 | 32 | 32 | 22 | 18 |
| 24 | 18 | 11 | 12 | 12 | 24 | 28 | 36 | 44 | 31 | 28 | 22 | 18 |
| 25 | 13 | 11 | 12 | 14 | 24 | 28 | 38 | 44 | 31 | 28 | 22 | 18 |
| 26 | 19 | 11 | 12 | 14 | 24 | 28 | 39 | 44 | 30 | 25 | 22 | 18 |
| 27 | 14 | 11 | 12 | 14 | 24 | 28 | 40 | 44 | 30 | 25 | 23 | 18 |
| 28 | 12 | 11 | 12 | 14 | 24 | 28 | 40 | 43 | 30 | 25 | 22 | 18 |
| 29 | 12 | 11 | 12 | 14 | ...... | 28 | 40 | 42 | 29 | 25 | 22 | 18 |
| 30 | 12 | 11 | 12 | 14 | ...... | 28 | 42 | 42 | 29 | 25 | 22 | 18 |
| 31 | 12 | ...... | 12 | 15 | ...... | 28 | ...... | 41 | ...... | 25 | 22 | ...... |
| **1909–10.** | | | | | | | | | | | | |
| 1 | 19 | 16 | 16 | ...... | 50 | 50 | 60 | 60 | 44 | 36 | 33 | 25 |
| 2 | 19 | 16 | 16 | ...... | 50 | 50 | 60 | 59 | 45 | 36 | 33 | 25 |
| 3 | 18 | 16 | 15 | (a) | 51 | 50 | 60 | 58 | 45 | 35 | 33 | 25 |
| 4 | 14 | 16 | 15 | 55 | 52 | 50 | 60 | 59 | 45 | 35 | 32 | 25 |
| 5 | 18 | 16 | 15 | 50 | 52 | 50 | 60 | 60 | 45 | 33 | 32 | 25 |
| 6 | 18 | 16 | 24 | 54 | 52 | 50 | 60 | 60 | 44 | 33 | 30 | 24 |
| 7 | 18 | 16 | 16 | 56 | 52 | 50 | 60 | 58 | 44 | 33 | 30 | 24 |
| 8 | 18 | 16 | 17 | 56 | 52 | 50 | 60 | 58 | 42 | 33 | 30 | 23 |
| 9 | 18 | 18 | ...... | 53 | 52 | 50 | 60 | 57 | 42 | 32 | 29 | 24 |
| 10 | 18 | 16 | 34 | 54 | 52 | 50 | 56 | 57 | 42 | 32 | 29 | 24 |
| 11 | 18 | 16 | 24 | 54 | 52 | 50 | 56 | 56 | 42 | 32 | 29 | 24 |
| 12 | 17 | 16 | 16 | 54 | 52 | 50 | 60 | 56 | 42 | 32 | 29 | 24 |
| 13 | 17 | 16 | 16 | 54 | 52 | 50 | 60 | 55 | 42 | 32 | 29 | 24 |
| 14 | 17 | 17 | 16 | 55 | 52 | 50 | 57 | 55 | 42 | 33 | 27 | 24 |
| 15 | 17 | 16 | 16 | 55 | 52 | 50 | 54 | 55 | 42 | 36 | 27 | 24 |
| 16 | 17 | 18 | 16 | 52 | 52 | 50 | 53 | 55 | 42 | 40 | 28 | 23 |
| 17 | 18 | 17 | 15 | 54 | 52 | 50 | 53 | 55 | 41 | 36 | 27 | 23 |
| 18 | 18 | 16 | 15 | 53 | 52 | 50 | 53 | 55 | 41 | 36 | 27 | 23 |
| 19 | 17 | 16 | 15 | 52 | 52 | 50 | 53 | 54 | 40 | 35 | 27 | 23 |
| 20 | 17 | 16 | 15 | 46 | 52 | 50 | 53 | 54 | 39 | 43 | 28 | 22 |
| 21 | 17 | 16 | 15 | 46 | 53 | 50 | 54 | 52 | 39 | 41 | 28 | 22 |
| 22 | 17 | 16 | 16 | 46 | 52 | 50 | 55 | 51 | 38 | 40 | 27 | 22 |
| 23 | 17 | 16 | 16 | 48 | 52 | 50 | 56 | 51 | 38 | 38 | 27 | 22 |
| 24 | 17 | 16 | 16 | 48 | 52 | 50 | 56 | 48 | 38 | 37 | 26 | 24 |
| 25 | 16 | 16 | 16 | 48 | 52 | 50 | 56 | 49 | 37 | 37 | 27 | 22 |
| 26 | 16 | 18 | 16 | 49 | 52 | 50 | 56 | 49 | 37 | 36 | 26 | 22 |
| 27 | 16 | 18 | 16 | 50 | 52 | 50 | 56 | 48 | 37 | 36 | 26 | 22 |
| 28 | 16 | 16 | 16 | 50 | 52 | 50 | 56 | 48 | 37 | 35 | 25 | 22 |
| 29 | 16 | 16 | 16 | 50 | ...... | 50 | 56 | 48 | 37 | 35 | 25 | 22 |
| 30 | 16 | 16 | 18 | 50 | ...... | 60 | 60 | 46 | 36 | 36 | 25 | 22 |
| 31 | 16 | ...... | (a) | 50 | ...... | 60 | ...... | 44 | ...... | 35 | 24 | ...... |

[a] Discharge over 100 second-feet at time of one daily observation.

*Daily discharge, in second-feet, of Mill Creek at Forest Home, Cal., for 190[illegible]–191[illegible]—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | 70 | 50 | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | 54 | 49 | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 59 | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 74 | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 61 | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | | [illegible] | [illegible] | [illegible] | [illegible] | 52 | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | | [illegible] | [illegible] | [illegible] | [illegible] | 66 | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | | [illegible] | [illegible] | [illegible] | [illegible] | (a) | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | | [illegible] | [illegible] | [illegible] | [illegible] | | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | | [illegible] | | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 11–31 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible]

*Monthly discharge of Mill Creek at Forest Home, Cal., for 1903–1911.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1903.** | | | | |
| September 23–30 | 18 | 13 | 15.6 | 247 |
| **1903–4.** | | | | |
| October | 19 | 12 | 13.7 | 842 |
| November | 12 | 11 | 11.4 | 678 |
| December | 11 | 10 | 10.5 | 646 |
| January | 10 | 9.0 | 9.50 | 584 |
| February | 14 | 8.9 | 9.76 | 561 |
| March | 50 | 9.4 | 14.4 | 885 |
| April 1–2, 4–30 | 26 | 14 | 18.1 | 1,040 |
| May | 17 | 15 | 15.7 | 965 |
| June | 15 | 11 | 12.7 | 756 |
| July | 12 | 9.0 | 10.2 | 627 |
| August 1–5, 7–31 | 12 | 9.8 | 10.6 | 631 |
| September | 11 | 8.4 | 9.07 | 540 |
| **1904–5.** | | | | |
| October | 9.5 | 8.1 | 8.37 | 515 |
| November 1–14, 16–30 | 8.2 | 7.0 | 7.98 | 459 |
| December | 7.8 | 7.4 | 7.55 | 464 |
| January | 14 | 7.4 | 8.08 | 497 |
| February 1–15, 17–28 | 18 | 8.2 | 13.0 | 696 |
| March 1–11, 13–31 | 66 | 18 | 23.8 | 1,420 |
| April | 31 | 26 | 29.0 | 1,730 |
| May 1–14, 18–31 | 78 | 36 | 52.6 | 2,920 |
| June | 54 | 30 | 44.6 | 2,650 |
| July | 38 | 24 | 29.7 | 1,830 |
| August | 25 | 19 | 21.5 | 1,320 |
| September | 20 | 14 | 18.0 | 1,070 |
| **1905–6.** | | | | |
| October | 17 | 14 | 15.6 | 959 |
| November | 21 | 15 | 15.8 | 940 |
| December | 26 | 14 | 15.0 | 922 |
| January | 24 | 13 | 14.0 | 861 |
| February | 20 | 13 | 14.5 | 806 |
| March 1–15, 18–23, 28–31 | 60 | 14 | 27.8 | 1,320 |
| April | 60 | 40 | 50.4 | 3,000 |
| May 1–27, 30–31 | 65 | 40 | 43.4 | 2,500 |
| June | 60 | 29 | 43.1 | 2,560 |
| July | 36 | 26 | 30.4 | 1,870 |
| August | 20 | 28 | 28.1 | 1,730 |
| September | 28 | 24 | 26.8 | 1,590 |
| **1906–7.** | | | | |
| October 1–5, 9–31 | 28 | 20 | 21.2 | 1,180 |
| November | 24 | 16 | 17.9 | 1,070 |
| December 1–27, 29–31 | 42 | 16 | 19.3 | 1,150 |
| January | 27 | 16 | 21.1 | 1,300 |
| February | 50 | 22 | 29.5 | 1,640 |
| March 1–19, 23–31 | 60 | 30 | 30.8 | 2,210 |
| April 1–18, 20–30 | 80 | 50 | 69.0 | 3,970 |
| May 1–6, 8–31 | 80 | 45 | 62.8 | 3,740 |
| June | 54 | 38 | 43.5 | 2,590 |
| July | 38 | 30 | 33.5 | 2,060 |
| August | 30 | 30 | 30.0 | 1,840 |
| September | 48 | 22 | 27.0 | 1,610 |
| **1907–8.** | | | | |
| October | 45 | 22 | 22.8 | 1,400 |
| November | 22 | 18 | 19.8 | 1,180 |
| December | 18 | 17 | 17.8 | 1,090 |
| January | 24 | 14 | 16.1 | 990 |
| February | 22 | 14 | 16.6 | 955 |
| March | 32 | 16 | 26.1 | 1,600 |
| April | 40 | 32 | 34.6 | 2,060 |
| May | 40 | 40 | 40.0 | 2,460 |
| June | 40 | 22 | 30.8 | 1,830 |
| July | 30 | 16 | 20.0 | 1,230 |
| August | 55 | 14 | 18.2 | 1,120 |
| September 1–8, 10–30 | 20 | 11 | 14.1 | 811 |

*Monthly discharge of Mill Creek at Forest Home, Cal., for 1908–1911*—Continued.

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off total in acre-feet. |
|---|---|---|---|---|
| **1908–9.** | | | | |
| October | 20 | 12 | 13.0 | 799 |
| November | [illegible] | 11 | 11.5 | [illegible] |
| December | 15 | 11 | 11.7 | 719 |
| January [illegible] | 45 | 11 | 16.0 | [illegible] |
| February | 29 | [illegible] | 21.[illegible] | 1,[illegible] |
| March | 35 | 23 | [illegible] | 1,[illegible] |
| April | 43 | 28 | 34.5 | 2,[illegible] |
| May | [illegible] | 41 | 45.7 | 2,[illegible] |
| June | 40 | 29 | 34.2 | 2,[illegible] |
| July | [illegible] | 25 | 26.[illegible] | 1,[illegible] |
| August 1–14, [illegible] | 29 | 22 | 23.1 | 1,[illegible] |
| September | 25 | 15 | 19.5 | 1,[illegible] |
| **1909–10.** | | | | |
| October | 19 | 14 | 17.[illegible] | 1,[illegible] |
| November | 23 | 16 | 16.3 | [illegible] |
| December 1–[illegible] | 34 | 15 | 17.0 | [illegible] |
| January 4–31 | 56 | 46 | 51.5 | 2,[illegible] |
| February | 53 | 50 | 51.9 | 2,[illegible] |
| March | 60 | 50 | 50.6 | 3,[illegible] |
| April | 60 | 53 | 57.0 | 3,[illegible] |
| May | 60 | 44 | 53.9 | 3,319 |
| June | 45 | 36 | 40.[illegible] | 2,[illegible] |
| July | 43 | 32 | 35.5 | 2,[illegible] |
| August | 33 | 24 | 28.2 | 1,[illegible] |
| September | 25 | 22 | 23.3 | 1,[illegible] |
| **1910–11.** | | | | |
| October | 27 | 22 | 22.[illegible] | 1,[illegible] |
| November | 25 | 22 | 22.[illegible] | 1,[illegible] |
| December | 23 | 20 | 21.4 | 1,[illegible] |
| January 1–[illegible] | 30 | 19 | 25.[illegible] | 1,430 |
| February [illegible] | 75 | 40 | 47.0 | 2,[illegible] |
| March 1–7 | 74 | 40 | 58.7 | [illegible] |
| April | | | | |
| May [illegible] | 97 | [illegible] | 91.3 | [illegible] |
| June 1–[illegible] | [illegible] | 62 | 74.9 | 4,[illegible] |
| July | [illegible] | 42 | 30.6 | [illegible] |
| August | 40 | 31 | 34.6 | 2,[illegible] |
| September | 45 | 26 | 29.4 | 1,[illegible] |
| **1911.** | | | | |
| October | 37 | 26 | 30.0 | 1,840 |
| November | 29 | 24 | 25.9 | 1,540 |
| December | 26 | 22 | 24.0 | 1,480 |

NOTE.—Monthly values computed by engineers of the United States Geological Survey.

*Miscellaneous discharge measurements of Mill Creek, San Bernardino County, Cal.*

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Second-feet.* |
| July [illegible], [illegible] | R. G. Bennett | Redlands Power Co., lower intake | [illegible] |
| Oct. [illegible] | W. W. Cockins, jr | do | [illegible] |
| Mar. 22, 1904 | Clapp and Murphy | Wier at Edison electric power house, Nos. 2 and 3. | 17.6 |
| Sept. [illegible], 1904 | W. B. Clapp | do | 14.[illegible] |
| Nov. [illegible], 1904 | E. C. La Rue | do | [illegible] |
| Apr. 14, 1905 | | At road crossing between Mentone and Santa Ana Canyon. | [illegible] |
| June [illegible], 1907 | | Above upper division, Edison Electric Co. | 61 |
| Sept. [illegible], 1907 | | Below power plant No. 1, Edison Electric Co. | 33 |

### PLUNGE, CITY, EAST TWIN, AND WEST TWIN CREEKS IN CANYON, SAN BERNARDINO COUNTY, CAL.

Plunge Creek, City Creek, East Twin Creek, and West Twin Creek, all rise on the southern slope of Sierra Madre and flow southward into the Santa Ana Valley, although all the flow is used for irrigation before it reaches the Santa Ana River.

*Discharge measurements of Plunge Creek, at head works in canyon, San Bernardino County, Cal., in 1898–1907.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1898. | | *Sec.-feet.* | 1904. | | *Sec.-feet.* |
| June 12 | J. B. Lippincott | 2.30 | Sept. 21 | W. B. Clapp | 0.6 |
| Sept. 9 | ....do | .20 | 1905. | | |
| 1899. | | | Sept. 22 | | 1 |
| Mar. 25 | S. G. Bennett | 10.90 | 1907. | | |
| Aug. 25 | ....do | .50 | Sept. 19 | | 3 |
| 1900. | | | 1903. | | |
| July 12 | S. G. Bennett | .34 | Apr. 23[a] | W. B. Clapp | .0 |
| 1902. | | | May 17[a] | ....do | .0 |
| Apr. 7 | S. G. Bennett | 12.40 | 1906. | | |
| Sept. 4 | W. B. Clapp | .37 | Apr. 15[a] | | 9.9 |
| 1903. | | | | | |
| Apr. 23 | W. B. Clapp and J. C. Clausen. | 23 | | | |
| May 17 | W. B. Clapp | 9 | | | |
| Sept. 11 | ....do | .6 | | | |

[a] Measurement made at Orange Avenue.

*Discharge measurements of City Creek at mouth of canyon, San Bernardino County, Cal., in 1898–1907.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1898. | | *Sec.-feet.* | 1903. | | *Sec.-feet.* |
| June 11 | J. B. Lippincott | 3.03 | Apr. 23 | W. B. Clapp and J. C. Clausen. | 22 |
| Sept. 9 | ....do | .07 | May 17 | W. B. Clapp | 11.2 |
| 1899. | | | Sept. 11 | ....do | .2 |
| Mar. 25 | S. G. Bennett | 8.80 | 1904. | | |
| Aug. 25 | ....do | .17 | Sept. 22 | W. B. Clapp | .5 |
| 1900. | | | 1905. | | |
| July 12 | S. G. Bennett | .16 | Sept. 23 | W. B. Clapp | 1.16 |
| Oct. 1 | W. W. Cockins, jr | .21 | 1907. | | |
| 1902. | | | Sept. 19 | | 4.6 |
| Apr. 7 | S. G. Bennett | 12.5 | | | |
| Sept. 4 | W. B. Clapp | .2 | | | |

*Discharge measurements of East Twin Creek in canyon, San Bernardino County, Cal., in 1903–1905.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1903. | | Sec.-ft. | 1904. | | Sec.-ft. |
| [illegible] | [illegible] Bennett | [illegible] | [illegible] | W. W. Cockins, jr. | [illegible] |
| | Total | [illegible] | | Total | [illegible] |
| [illegible] | [illegible] Bennett | [illegible] | 1905. | | |
| | [illegible] | [illegible] | Apr. [illegible] | S. G. Bennett | [illegible] |
| | Total | [illegible] | | Total | [illegible] |
| [illegible] | [illegible] Bennett | [illegible] | Sept. [illegible] | W. B. Clapp | [illegible] |
| | [illegible] | [illegible] | 1906. | | |
| | Total | [illegible] | Apr. [illegible] | Clapp and Clausen | |
| [illegible] | S. G. Bennett | [illegible] | May [illegible] | W. B. Clapp | [illegible] |
| | [illegible] | [illegible] | | Total | [illegible] |
| | Total | [illegible] | | | |
| 1904. | | | | | |
| [illegible] | S. G. Bennett | [illegible] | Sept. [illegible] | W. B. Clapp (totals) | [illegible] |
| | [illegible] | [illegible] | | | |
| | Total | [illegible] | | | |

[illegible] Ditch. [illegible] Tunnel. [illegible] Creek.

*Discharge measurements of East Twin Creek, San Bernardino County, Cal., in 1906–1907.*

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| 1906. | | | Sec.-ft. |
| [illegible] | W. B. Clapp | [illegible] mile above Southern California Ry | [illegible] |
| [illegible] | [illegible] | do | |
| 1906. | | | |
| [illegible] | W. B. Clapp | Head of pipe line | [illegible] |
| 1906. | | | |
| [illegible] | W. B. Clapp | Near Arrowhead Springs | [illegible] |
| 1907. | | | |
| [illegible] | | do | [illegible] |
| 1907. | | | |
| [illegible] | | do | [illegible] |

*Discharge measurements of West Twin Creek[a] in canyon, San Bernardino County, Cal., in 1898–1902.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| | | *Sec.-ft.* | 1899. | | *Sec.-ft.* |
| 1898. | | [b]1.06 | Aug. 25 | S. G. Bennett | 0.20 |
| June 11 | J. B. Lippincott | [c].08 | | | |
| | | [d].40 | 1900. | | |
| | | | July 12 | S. G. Bennett | .22 |
| | Total | 2.14 | Oct. 1 | W. W. Cockins, jr | .16 |
| Sept. 9 | J. B. Lippincott | .36 | 1902. | | |
| | | | Apr. 4 | S. G. Bennett | 3.20 |
| 1899. | | | Sept. 4 | W. B. Clapp | .13 |
| Mar. 21 | S. G. Bennett | 3.00 | | | |

[a] More recently called Waterman Canyon Creek.
[b] Pipe line to Waterman ranch.
[c] Flume to Settlers.
[d] Hot Springs at Old ranch.

*Discharge measurements of West Twin Creek,[a] San Bernardino County, Cal., in 1903–1907.*

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| 1903. | | | *Sec.-ft.* |
| Apr. 23 | Clapp and Clausen | Mouth of canyon | 8.6 |
| 23 | W. B. Clapp | Southern California Ry | .0 |
| May 18 | .....do | .....do | .0 |
| 18 | .....do | Total at mouth of canyon | 4.4 |
| Sept. 11 | .....do | .....do | .3 |
| 1904. | | | |
| Sept. 21 | W. B. Clapp | Head of pipe line | .4 |
| 1905. | | | |
| July 13 | K. Sanborn | Near Arrowhead Springs | 1.02 |
| 1906. | | | |
| July 14 | K. Sanborn | Mouth of canyon | 4 |
| 1907. | | | |
| Sept. 17 | K. Sanborn | Near Arrowhead Springs | 2 |

[a] More recently called Waterman Canyon Creek.

## WATERMAN CANYON CREEK NEAR SAN BERNARDINO, CAL.

This station, which is located just above the old toll bridge at the mouth of the canyon in the SW. ¼ SW. ¼ sec. 2, T. 1 N., R. 4 W., about 6 miles north of San Bernardino, was established November 2, 1911.

The gage is a vertical staff fastened to an alder tree on the left bank about 300 feet above the bridge. The channel is composed of bowlders and gravel and will shift at high stages. The drainage area is 4.55 square miles and was almost entirely burned over by a forest fire July 25 to August 4, 1911.

Discharge measurements are made from a foot plank 15 feet below the gage or by wading. The results are considered fair.

*Discharge measurements of Waterman Canyon Creek near San Bernardino, Cal., 1911–12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| [illegible] | F. C. Ebert | [illegible] | [illegible] | [illegible] | F. C. Ebert | [illegible] | [illegible] |
| 1912. | | | | [illegible] | ....do | [illegible] | [illegible] |
| Jan. [illegible] | F. C. Ebert | [illegible] | [illegible] | [illegible] | ....do | [illegible] | [illegible] |
| [illegible] | ....do | [illegible] | [illegible] | [illegible] | ....do | [illegible] | [illegible] |
| [illegible] | ....do | [illegible] | [illegible] | May [illegible] | ....do | [illegible] | [illegible] |

*Daily gage height, in feet, of Waterman Canyon Creek near San Bernardino, Cal., for 1911–12.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.34 | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.34 | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.34 | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.34 | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.34 | [illegible] |
| 21 | 1.74 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.34 | [illegible] |
| 22 | 1.74 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.34 | [illegible] |
| 23 | 1.74 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.34 | [illegible] |
| 24 | 1.74 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.34 | [illegible] |
| 25 | 1.74 | 1.76 | [illegible] | [illegible] | [illegible] | [illegible] | 1.33 | [illegible] |
| 26 | 1.74 | 1.75 | [illegible] | [illegible] | [illegible] | [illegible] | 1.33 | [illegible] |
| 27 | 1.74 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.33 | [illegible] |
| 28 | 1.74 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.31 | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | ...... | [illegible] | [illegible] | ...... | ...... | ...... | [illegible] | ...... |

NOTE.—Flood of Mar. [illegible], 1912 partially destroyed the gage and filled channel with sand and gravel, which scoured out as flood subsided.

*Daily discharge, in second-feet, of Waterman Canyon Creek near San Bernardino, Cal., for 1911-12.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|
| 1 | 1.7 | 2.9 | 2.9 | 1.9 | 2.0 | 6.2 | 5.0 | 3.2 |
| 2 | 1.7 | 3.0 | 2.7 | 2.0 | 1.8 | 5.9 | 4.8 | 3.2 |
| 3 | 1.8 | 3.0 | 2.7 | 2.1 | 1.8 | 5.5 | 4.6 | 3.2 |
| 4 | 1.8 | 3.0 | 2.8 | 2.2 | 2.5 | 5.2 | 4.4 | 3.2 |
| 5 | 2.0 | 2.5 | 2.8 | 2.1 | ........ | 5.2 | 4.2 | 3.2 |
| 6 | 1.8 | 2.5 | 2.8 | 2.1 | ........ | 5.2 | 4.6 | 3.2 |
| 7 | 1.9 | 3.5 | 2.8 | 2.1 | ........ | 5.2 | 4.6 | 3.2 |
| 8 | 2.0 | 3.2 | 2.8 | 2.1 | ........ | 5.5 | 4.8 | 3.2 |
| 9 | 2.0 | 3.0 | 2.8 | 2.1 | 8.2 | 20 | 4.8 | 3.2 |
| 10 | 2.0 | 3.0 | 2.8 | 2.0 | 57 | 10. | 4.6 | 3.2 |
| 11 | 2.4 | 2.5 | 2.6 | 2.0 | 30 | 24 | 4.4 | 3.2 |
| 12 | 2.1 | 2.3 | 2.4 | 2.0 | 47 | 16.7 | 4.4 | 3.2 |
| 13 | 2.1 | 2.3 | 2.2 | 2.1 | 22 | 13.4 | 4.2 | 3.2 |
| 14 | 2.1 | 2.4 | 2.2 | 2.1 | 18 | 13.4 | 4.2 | 3.1 |
| 15 | 2.1 | 2.4 | 2.2 | 2.1 | 14 | 13.4 | 4.2 | 3.1 |
| 16 | 2.4 | 2.3 | 2.2 | 2.1 | 12 | 12.4 | 4.0 | 2.9 |
| 17 | 2.5 | 3.0 | 2.1 | 2.1 | 8.8 | 11.4 | 4.0 | 2.7 |
| 18 | 2.6 | 3.0 | 2.1 | 1.8 | 7.8 | 11.0 | 4.0 | 2.7 |
| 19 | 2.6 | 2.6 | 2.1 | 1.8 | 5.9 | 9.5 | 4.0 | 2.9 |
| 20 | 2.5 | 2.6 | 2.1 | 1.9 | 6.8 | 8.2 | 4.0 | 2.7 |
| 21 | 2.6 | 2.6 | 2.1 | 1.7 | 5.9 | 7.8 | 4.0 | 3.0 |
| 22 | 2.6 | 2.9 | 2.1 | 1.7 | 6.2 | 7.2 | 4.0 | 3.2 |
| 23 | 2.6 | 3.0 | 2.0 | 1.7 | 5.2 | 6.8 | 4.0 | 3.2 |
| 24 | 2.6 | 2.9 | 2.0 | 1.8 | 5.0 | 6.5 | 4.0 | 3.0 |
| 25 | 2.6 | 2.9 | 2.1 | 1.8 | 7.8 | 6.5 | 3.8 | 3.0 |
| 26 | 2.6 | 2.9 | 2.1 | 1.8 | 7.8 | 6.2 | 3.8 | 3.1 |
| 27 | 2.6 | 2.9 | 2.1 | 1.8 | 8.2 | 6.5 | 3.8 | 3.1 |
| 28 | 2.6 | 3.2 | 2.1 | 1.8 | 6.5 | 5.9 | 3.4 | 3.1 |
| 29 | 2.9 | 3.2 | 2.0 | 1.6 | 5.9 | 5.2 | 3.2 | 3.2 |
| 30 | 2.9 | 3.5 | 2.0 | ........ | 6.5 | 5.0 | 3.2 | 3.0 |
| 31 | ........ | 3.2 | 2.0 | ........ | 6.4 | ........ | 3.2 | ........ |

NOTE.—Daily discharge determined from a fairly well-defined rating curve applicable Nov. 2, 1911, to Mar. 4, 1912, and Mar. 19 to June 30, 1912. Indirect method for shifting channels used Mar. 9-18, 1912. No estimates have been attempted for the flood period Mar. 5-8, 1912.

*Monthly discharge of Waterman Canyon Creek near San Bernardino, Cal., for 1911-12.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet.) | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| November | 2.8 | 1.7 | 2.28 | 136 | B. |
| December | 3.4 | 2.3 | 2.78 | 171 | B. |
| January | 2.9 | 2.0 | 2.35 | 144 | B. |
| February | 2.2 | 1.6 | 1.94 | 112 | B. |
| April | 24 | 5.0 | 9.03 | 537 | B. |
| May | 5.0 | 3.2 | 4.14 | 255 | B. |
| June | 3.2 | 2.7 | 3.09 | 184 | B. |

## DEVIL CANYON CREEK NEAR SAN BERNARDINO, CAL.

This station, which is located at the mouth of the canyon, in the SE. ¼ NE. ¼, sec. 6, T. 1 N., R. 4 W., about 200 feet below the ford, about 7 miles northwest of San Bernardino, was established November 1, 1911.

The gage is a vertical staff fastened to an alder tree on the left bank about 200 feet below the ford. The channel is composed of bowlders and gravel. Discharge measurements are made from a foot plank about 75 feet below the gage or by wading.

This station is maintained in cooperation with the United States Forest Service, by whom the gage-height record was furnished. The results are considered good.

The area drained by Devil Canyon Creek is similar in all respects to that tributary to Waterman Canyon Creek except that it retains its forest cover.

*Discharge measurements of Devil Canyon Creek near San Bernardino, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Nov. 1 | F. C. Ebert | 1.48 | 2.1 | Mar. 10 | F. C. Ebert | 2.15 | 15 |
| 1912. | | | | 19 | do | 1.74 | 4.5 |
| Jan. 12 | F. C. Ebert | 1.55 | 2.9 | Apr. 19 | do | 1.89 | [illegible] |
| Feb. 19 | do | 1.51 | 2.0 | May 28 | do | 1.63 | 2.5 |

*Daily gage height, in feet, of Devil Canyon Creek near San Bernardino, Cal., for 1911-12.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|
| 1 | 1.48 | 1.53 | 1.52 | | 1.6 | | 1.75 | 1.6 |
| 2 | 1.47 | 1.53 | | | | 1.71 | | 1.6 |
| 3 | 1.48 | 1.52 | | | | | 1.75 | |
| 4 | 1.40 | 1.56 | | 1.5 | 1.95 | | | |
| 5 | 1.49 | 1.54 | 1.57 | | | 1.7 | 1.74 | |
| 6 | 1.49 | 1.62 | | | 2.16 | | 1.75 | |
| 7 | 1.50 | 1.61 | 1.55 | | | 1.7 | | 1.6 |
| 8 | 1.51 | 1.59 | | | | 1.80 | 1.79 | 1.59 |
| 9 | 1.52 | | | | | 1.86 | 1.76 | 1.6 |
| 10 | 1.60 | | | | 2.18 | 1.95 | 1.74 | 1.6 |
| 11 | 1.56 | | | 1.51 | 1.95 | 2.16 | 1.73 | 1.6 |
| 12 | 1.52 | | 1.55 | | 2.12 | 2.19 | 1.74 | |
| 13 | 1.52 | | | | | 1.98 | 1.73 | 1.6 |
| 14 | 1.52 | | 1.52 | | | 2.0 | 1.71 | 1.6 |
| 15 | 1.50 | | | | | 2.0 | 1.7 | |
| 16 | 1.50 | | | | | 1.98 | 1.68 | 1.6 |
| 17 | 1.50 | | | | 1.92 | 1.95 | 1.66 | 1.58 |
| 18 | 1.40 | | | 1.5 | | 1.92 | 1.64 | 1.58 |
| 19 | 1.40 | | | 1.51 | 1.74 | 1.9 | 1.63 | 1.58 |
| 20 | 1.50 | | | | 1.79 | 1.88 | 1.63 | 1.57 |
| 21 | 1.52 | | 1.52 | | | 1.85 | | 1.57 |
| 22 | 1.54 | | | 1.5 | | 1.82 | 1.63 | 1.58 |
| 23 | 1.54 | | | | | 1.8 | 1.62 | 1.59 |
| 24 | 1.57 | | | | 1.72 | 1.79 | | 1.58 |
| 25 | 1.56 | | | 1.5 | | 1.78 | 1.62 | 1.53 |
| 26 | 1.54 | | | | | 1.82 | 1.62 | 1.53 |
| 27 | 1.54 | | | | | 1.8 | 1.61 | 1.52 |
| 28 | 1.55 | | 1.52 | | | 1.78 | 1.61 | 1.51 |
| 29 | 1.55 | | | 1.5 | 1.78 | 1.76 | 1.60 | 1.5 |
| 30 | 1.54 | | | | | 1.75 | 1.60 | 1.5 |
| 31 | | | | | 1.77 | | 1.60 | |

NOTE.—Flood existed at this station Mar. 5-9, 1912. Maximum gage height was 2.5 feet.

*Daily discharge, in second-feet, of Devil Canyon Creek near San Bernardino, Cal., for 1911–12.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.0 | 2.4 | 2.3 | 2.3 | 2.8 | 4.6 | 4.7 | 2.8 |
| 2 | 2.1 | 2.4 | 2.3 | 2.3 | 5.0 | 4.1 | 4.7 | 2.8 |
| 3 | 2.1 | 2.3 | 2.4 | 2.3 | 7.2 | 4.0 | 4.7 | 2.8 |
| 4 | 2.2 | 2.6 | 2.5 | 2.2 | 9.4 | 3.9 | 4.6 | 2.8 |
| 5 | 2.2 | 2.4 | 2.6 | 2.2 | ........ | 3.9 | 4.5 | 2.8 |
| 6 | 2.2 | 3.0 | 2.5 | 2.2 | ........ | 3.9 | 4.7 | 2.8 |
| 7 | 2.2 | 2.9 | 2.5 | 2.2 | ........ | 3.9 | 5.0 | 2.8 |
| 8 | 2.3 | 2.7 | 2.5 | 2.3 | ........ | 3.8 | 5.3 | 2.7 |
| 9 | 2.3 | ........ | 2.5 | 2.3 | ........ | 6.9 | 4.9 | 2.8 |
| 10 | 3.8 | ........ | 2.5 | 2.3 | 19 | 9.7 | 4.5 | 2.8 |
| 11 | 2.6 | ........ | 2.5 | 2.3 | 9.4 | 18 | 4.4 | 2.8 |
| 12 | 2.3 | ........ | 2.5 | 2.3 | 16 | 20 | 4.5 | 2.8 |
| 13 | 2.3 | ........ | 2.4 | 2.3 | 14 | 10 | 4.4 | 2.8 |
| 14 | 2.3 | ........ | 2.3 | 2.3 | 12 | 11 | 4.1 | 2.8 |
| 15 | 2.2 | ........ | 2.3 | 2.2 | 11 | 11 | 3.9 | 2.8 |
| 16 | 2.2 | ........ | 2.3 | 2.2 | 10 | 10 | 3.7 | 2.8 |
| 17 | 2.2 | ........ | 2.3 | 2.2 | 8.4 | 9.4 | 3.5 | 2.7 |
| 18 | 2.2 | ........ | 2.3 | 2.2 | 6.4 | 8.4 | 3.2 | 2.7 |
| 19 | 2.2 | ........ | 2.3 | 2.3 | 4.5 | 7.8 | 3.1 | 2.7 |
| 20 | 2.2 | ........ | 2.3 | 2.3 | 5.3 | 7.3 | 3.1 | 2.6 |
| 21 | 2.3 | ........ | 2.3 | 2.2 | 5.0 | 6.6 | 3.1 | 2.6 |
| 22 | 2.4 | ........ | 2.3 | 2.2 | 4.7 | 6.0 | 3.1 | 2.7 |
| 23 | 2.4 | ........ | 2.3 | 2.2 | 4.4 | 5.5 | 3.0 | 2.6 |
| 24 | 2.6 | ........ | 2.3 | 2.2 | 4.2 | 5.3 | 3.0 | 2.5 |
| 25 | 2.6 | ........ | 2.3 | 2.2 | 4.4 | 5.2 | 3.0 | 2.4 |
| 26 | 2.4 | ........ | 2.3 | 2.2 | 4.6 | 6.0 | 3.0 | 2.4 |
| 27 | 2.4 | ........ | 2.3 | 2.2 | 4.8 | 5.5 | 2.9 | 2.3 |
| 28 | 2.5 | ........ | 2.3 | 2.2 | 5.0 | 5.2 | 2.9 | 2.3 |
| 29 | 2.5 | ........ | 2.3 | 2.2 | 5.2 | 4.9 | 2.8 | 2.2 |
| 30 | 2.4 | ........ | 2.3 | ........ | 5.1 | 4.7 | 2.8 | 2.2 |
| 31 | ........ | ........ | 2.3 | ........ | 5.0 | ........ | 2.8 | ...... |

NOTE.—Daily discharge determined from a fairly well defined rating curve. Discharge interpolated for days on which gage was not read except Dec. 9–31, 1911, and Mar. 5–9, 1912, which was a flood period and for which no estimates have been made.

*Monthly discharge of Devil Canyon Creek near San Bernardino, Cal., for 1911–12.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| November | 3.8 | 2.0 | 2.35 | 140 | D. |
| December 1–8 | 3.0 | 2.3 | 2.59 | 41.1 | D. |
| January | 2.6 | 2.3 | 2.37 | 146 | B. |
| February | 2.3 | 2.2 | 2.24 | 129 | B. |
| April | 20 | 3.8 | 7.22 | 430 | B. |
| May | 5.3 | 2.8 | 3.80 | 234 | B. |
| June | 2.8 | 2.2 | 2.65 | 158 | B. |

## LYTLE CREEK AT MOUTH OF CANYON, CAL.

This small stream drains the southern slope of the Sierra Madre and discharges its waters upon the plains northwest of San Bernardino. Although it drains a comparatively small area of 54 square miles, at the mouth of the canyon its waters are important for irrigation purposes. Owing to the controversies which have arisen over its diversions, a number of lawsuits for the settlement of the claims have been instituted from time to time. A number of measurements of this

... the canyon from [illegible] to 189[illegible], inclusi[illegible] ... obtained from court records of proceeding[illegible] ... the creek was involved. These [illegible] ... by Judge A. [illegible] McKi[illegible] ... and C. [illegible] Newma[illegible] ...

[illegible]

*Discharge, in second-feet, of Lytle Creek main canal above Rialto, Cal., for 189 , 189 .*

| Day | Apr. | May. | June. | July. | Aug. | Sept. | Day | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1894. | | | | | | | 1894. | | | | | | |
| 1 | | | 15.5 | | | | 16 | 22.[illegible] | | 14.[illegible] | | | |
| 2 | | | | | | | 17 | | 19.[illegible] | | | | |
| 3 | | 24.1 | 17.2 | | 10.[illegible] | | 18 | | | 1[illegible] | | 1[illegible] | 1[illegible] |
| 4 | | | | | | | 19 | 22.[illegible] | | | 11.[illegible] | | |
| 5 | 16.1 | | | 10.8 | | | 20 | | | | | | |
| 6 | | 22.6 | | | | | 21 | | | 14.8 | 12.[illegible] | | |
| 7 | | | 14.1 | | | | 22 | 24.[illegible] | | | | 11.[illegible] | 1[illegible] |
| 8 | 19.9 | | | | 10.8 | 13.0 | 23 | | | [illegible] | | | |
| 9 | | | | | | | 24 | | 18.2 | 14.[illegible] | | | |
| 10 | | | | | | | 25 | 2[illegible] | | | | | |
| 11 | 17.8 | 18.5 | 14.3 | 10.8 | | | 26 | | | | | | |
| 12 | | | | | | | 27 | | | 1[illegible] | | | |
| 13 | 21.8 | | | 13.4 | | | 28 | | 1[illegible] | | | | |
| 14 | | | 14.3 | | | 13.2 | 29 | | | | | | |
| 15 | | | | | | | 30 | | | | | | |
| | | | | | | | 31 | | | | 11.[illegible] | 1[illegible] | |

| Day. | Oct. | Nov. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1894-95. | | | | | | | | |
| 1 | | | | | [illegible] | | | |
| 2 | | | | | | | | |
| 3 | 13.5 | | | | | | | |
| 4 | | | | | [illegible] | | | [illegible] |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | 11.4 | 14.5 | | | | | | |
| 8 | | | | [illegible] | | | | |
| 9 | | 1[illegible].7 | | | | | | |
| 10 | | | | | | | | [illegible] |
| 11 | 13.7 | | | | | | | |
| 12 | | | | | | | | [illegible] |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | [illegible] | |
| 17 | | | | | | | | |
| 18 | 14.5 | | 2[illegible] | [illegible] | | | | [illegible] |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | [illegible] | | | | |
| 22 | | 12.[illegible] | | | | | | |
| 23 | | | [illegible] | | | | [illegible] | |
| 24 | | | | | | | | |
| 25 | 14.2 | | | | | | | [illegible] |
| 26 | | | | | | | [illegible] | |
| 27 | | | | | | | | |
| 28 | | | | | | | | [illegible] |
| 29 | | | | | | | | |
| 30 | | 1[illegible].5 | | | | | | |
| 31 | | | | | | | | |

Daily discharge, in second-feet, of [illegible] Creek [illegible], Cal., [illegible]—Continued.

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | Aug. |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily discharge, in second-feet, of Lytle Creek main canal above Rialto, Cal., for 1894–1901*—Continued.

| Day. | May. | June. | July. | Day. | May. | June. | July. | Day. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1898. | | | | 1898. | | | | 1898. | | | |
| 1 | | | 10.9 | 11 | | | | 21 | | | |
| 2 | | | | 12 | | | | 22 | | 11.7 | |
| 3 | | | | 13 | | | | 23 | | | |
| 4 | | | | 14 | | | | 24 | | | |
| 5 | | | | 15 | | 13.9 | | 25 | | | |
| 6 | | | | 16 | | | | 26 | | | |
| 7 | | | | 17 | | | | 27 | | | |
| 8 | | | | 18 | | | | 28 | 14.6 | 9.0 | |
| 9 | | | | 19 | | | | 29 | | | |
| 10 | | | | 20 | | 11.5 | | 30 | | | |
| | | | | | | | | 31 | | | |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1899. | | | | | | | | | | | | |
| 1 | 11.1 | 11.8 | 11.2 | 9.7 | 11.2 | 12.2 | 6.3 | 9.4 | 14.5 | 10.9 | 10.5 | 11.1 |
| 2 | 12.1 | 12.1 | 11.1 | 8.9 | 10.9 | 10.4 | 6.8 | 10.4 | 15.1 | 10.8 | 10.3 | 11.3 |
| 3 | 12.1 | 12.1 | 11.2 | 8.5 | 10.9 | 9.7 | 6.4 | 9.6 | 16.6 | 10.8 | 10.3 | 11.4 |
| 4 | 11.4 | 12.4 | 11.1 | 12.6 | 10.5 | 9.5 | 6.4 | 10.7 | 16.7 | 10.8 | 10.6 | 11.1 |
| 5 | 11.7 | 12.4 | 10.8 | 12.5 | 10.5 | 9.4 | 6.4 | 12.2 | 16.0 | 10.7 | 10.5 | 11.3 |
| 6 | 11.6 | 12.5 | 10.6 | 12.1 | 10.5 | 9.6 | 6.4 | 11.0 | 16.0 | 10.6 | 10.6 | 11.3 |
| 7 | 11.6 | 12.6 | 10.4 | 11.9 | 10.5 | 9.2 | 6.3 | 10.8 | 16.0 | 10.1 | 10.6 | 11.3 |
| 8 | 11.6 | 12.4 | 10.4 | 11.8 | 10.2 | 9.0 | 6.2 | 11.0 | 15.9 | 9.9 | 9.9 | 11.6 |
| 9 | 11.6 | 12.1 | 10.9 | 11.7 | 11.8 | ...... | 6.2 | 11.0 | 16.5 | 10.2 | 9.9 | 11.4 |
| 10 | 12.0 | 11.8 | 10.6 | 11.9 | 9.5 | 7.2 | 6.0 | 8.7 | 16.1 | 10.8 | 10.0 | 11.5 |
| 11 | 16.1 | 11.8 | 10.6 | 11.7 | 9.5 | 7.5 | 5.9 | 12.0 | 16.0 | 11.7 | 10.2 | 11.4 |
| 12 | 13.1 | 11.8 | 10.6 | 11.7 | 9.2 | 8.2 | 6.0 | 12.0 | 15.8 | [a]72.1 | 10.5 | 11.3 |
| 13 | 12.2 | 11.8 | 10.7 | 11.0 | 9.6 | 8.1 | 5.9 | 12.2 | 15.3 | 12.4 | 10.9 | 11.2 |
| 14 | 12.0 | 11.6 | 10.7 | 10.6 | 9.5 | 7.8 | 5.9 | 12.1 | 15.4 | 13.5 | 11.0 | 11.1 |
| 15 | 11.9 | 11.5 | 10.7 | 10.6 | 9.8 | ...... | 6.0 | 12.3 | 16.0 | 12.7 | 11.3 | 11.2 |
| 16 | 12.0 | 11.5 | 15.3 | 10.7 | 9.4 | 7.6 | 6.0 | 12.3 | 15.5 | 13.0 | 11.7 | 12.9 |
| 17 | 12.0 | 11.5 | 14.7 | 10.6 | 9.4 | 7.8 | 5.8 | 12.2 | 15.3 | 13.0 | 11.5 | 11.8 |
| 18 | 12.0 | 11.3 | 13.7 | 10.7 | 9.4 | 7.9 | 5.4 | 12.6 | 14.3 | 12.3 | 12.0 | 11.8 |
| 19 | 11.9 | 11.4 | 12.3 | 10.2 | 9.7 | 7.7 | 5.6 | 13.0 | 15.7 | 12.0 | 11.9 | 11.6 |
| 20 | 11.8 | 11.3 | 13.7 | 10.8 | 9.8 | 7.3 | 5.6 | 13.0 | 14.9 | 11.4 | 11.8 | 11.6 |
| 21 | 11.7 | 11.3 | 13.1 | 9.9 | 9.5 | 7.5 | 5.8 | 12.5 | 15.2 | 11.2 | 12.2 | 11.3 |
| 22 | 11.8 | 11.3 | 12.9 | 9.9 | 9.4 | 7.6 | 7.2 | 12.4 | 16.1 | 11.6 | 12.7 | 11.1 |
| 23 | 11.7 | 11.3 | 12.8 | 10.3 | 9.4 | 7.4 | 8.6 | 12.4 | 10.8 | 11.9 | 12.1 | 11.1 |
| 24 | 11.6 | 11.8 | 13.2 | 10.6 | 9.2 | 7.1 | 9.3 | 12.5 | 10.4 | 10.3 | 12.0 | 11.1 |
| 25 | 11.6 | 11.4 | 14.8 | 10.5 | 9.2 | 7.2 | 8.9 | 12.4 | 10.3 | 10.7 | 13.8 | 10.9 |
| 26 | 11.6 | 11.4 | 13.5 | 10.4 | 9.0 | 7.4 | 9.2 | 12.6 | 10.3 | 11.4 | 11.7 | 11.2 |
| 27 | 11.6 | 11.3 | 13.4 | 10.4 | 9.0 | 7.3 | 9.4 | 12.5 | 10.5 | 11.3 | 11.5 | 11.1 |
| 28 | 11.6 | 11.3 | 13.6 | 10.4 | 9.0 | 7.2 | 9.5 | 12.2 | 10.5 | 11.1 | 11.5 | 11.1 |
| 29 | 11.6 | ...... | 13.6 | 11.0 | 9.4 | 6.7 | 9.7 | 12.3 | 10.6 | 11.0 | 11.4 | 11.2 |
| 30 | 11.6 | ...... | 13.5 | 11.2 | 9.3 | 6.4 | 9.6 | 12.2 | 10.6 | 11.4 | 11.2 | 11.1 |
| 31 | 11.7 | ...... | 13.5 | ...... | ...... | ...... | 10.0 | 12.1 | ...... | 11.3 | ...... | 11.3 |

[a] Rain in mountains.

*Daily discharge, in second-feet, of Lytle Creek main canal above Rialto, Cal., for 1894–1901—Continued.*

| Day. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. |
|---|---|---|---|---|---|---|---|---|
| 1901. | | | | | | | | |
| 1 | ........ | 21.7 | 14.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | ........ | 20.4 | 13.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | ........ | 19.8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | ........ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | ........ | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | ........ | 14.9 | 13.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | ........ | 13.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ........ |
| 8 | ........ | 15.1 | 14.6 | [illegible] | [illegible] | [illegible] | [illegible] | ........ |
| 9 | ........ | 14.3 | 13.2 | [illegible] | [illegible] | [illegible] | [illegible] | ........ |
| 10 | ........ | 12.1 | 12.4 | [illegible] | [illegible] | [illegible] | [illegible] | ........ |
| 11 | ........ | 12.7 | 12.9 | 9.7 | 10.2 | [illegible] | [illegible] | ........ |
| 12 | ........ | 13.5 | 12.7 | 9.3 | [illegible] | [illegible] | [illegible] | ........ |
| 13 | ........ | 14.0 | 12.7 | 9.3 | [illegible] | [illegible] | [illegible] | ........ |
| 14 | ........ | 14.3 | ........ | 9.3 | [illegible] | [illegible] | [illegible] | ........ |
| 15 | ........ | 14.3 | 12.9 | 9.5 | [illegible] | [illegible] | [illegible] | ........ |
| 16 | ........ | 16.1 | 12.1 | 9.5 | 10.2 | [illegible] | [illegible] | |
| 17 | ........ | 16.1 | 12.1 | 9.5 | 10.2 | [illegible] | [illegible] | ........ |
| 18 | ........ | 16.1 | 12.1 | 9.5 | [illegible] | [illegible] | [illegible] | ........ |
| 19 | ........ | 16.1 | 12.1 | [illegible] | 10.0 | [illegible] | [illegible] | ........ |
| 20 | ........ | 16.1 | 12.4 | 9.1 | 10.2 | [illegible] | [illegible] | ........ |
| 21 | ........ | 15.8 | 12.4 | 9.5 | [illegible] | 9.7 | [illegible] | ........ |
| 22 | ........ | 14.9 | 11.6 | 9.2 | [illegible] | 11.3 | [illegible] | ........ |
| 23 | ........ | 14.9 | 11.9 | 9.5 | [illegible] | 11.3 | [illegible] | ........ |
| 24 | ........ | 15.8 | 12.9 | ........ | [illegible] | 11.0 | [illegible] | ........ |
| 25 | ........ | 18.5 | 12.7 | ........ | [illegible] | [illegible] | [illegible] | ........ |
| 26 | ........ | 16.7 | 12.1 | ........ | 10.2 | 10.5 | ........ | ........ |
| 27 | 16.1 | 16.1 | 11.6 | ........ | 10.2 | 10.5 | ........ | ........ |
| 28 | 16.1 | 16.1 | 11.0 | ........ | [illegible] | [illegible] | ........ | ........ |
| 29 | 16.1 | 16.1 | 11.0 | ........ | [illegible] | [illegible] | [illegible] | ........ |
| 30 | 16.1 | 16.1 | 10.5 | ........ | 10.0 | 11.3 | [illegible] | ........ |
| 31 | ........ | 15.2 | ........ | ........ | 9.7 | ........ | 15.8 | ........ |

*Discharge measurements of Lytle Creek at mouth of canyon, San Bernardino County, Cal., in 1896–1906.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| 1896. | | *Sec.-feet.* | 1903. | | *Sec.-feet.* |
| July 24 | J. H. Quinton.. | 15.7 | Apr. 1 | W. B. Clapp | [illegible] |
| 1898. | | | 22 | Clapp and Clausen | [illegible] |
| June 10 | J. B. Lippincott | 10.7 | 22[a] | W. B. Clapp | [illegible] |
| Aug. 27 | F. H. Olmsted | 10.0 | May 19[a] | do | [illegible] |
| 1899. | | | 19 | do | [illegible] |
| Aug. 20 | S. G. Bennett | 12.5 | July 2 | do | 16.5 |
| 1900. | | | Sept. 12 | do | 14.7 |
| June 8 | S. G. Bennett | 6.2 | 1904. | | |
| Sept. 20 | W. W. Cockins, jr. | 4.6 | Sept. 22 | W. B. Clapp | 9.2 |
| 1902. | | | 1905. | | |
| Apr. 4 | S. G. Bennett | 19.9 | June 16 | K. Sanborn | 23 |
| Sept. 5 | W. B. Clapp | 5.0 | 1906. | | |
| | | | July 16 | | 31.4 |

[a] Measurement made at Highland Avenue.

*Monthly discharge of Lytle Creek canals at intake for 1899.*

[Drainage area, 54 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1899.** | | | | | | |
| January | 16.07 | 11.07 | 11.90 | 0.220 | 0.25 | 732 |
| February | 12.60 | 11.29 | 11.74 | .216 | .23 | 650 |
| March | 15.29 | 10.37 | 12.23 | .226 | .26 | 750 |
| April | 12.55 | 8.47 | 10.83 | .200 | .22 | 643 |
| May | 11.78 | 8.98 | 9.81 | .181 | .21 | 603 |
| June | 12.20 | 6.39 | 8.14 | .150 | .17 | 482 |
| July | 10.02 | 5.41 | 7.06 | .131 | .15 | 437 |
| August | 12.60 | 8.68 | 11.76 | .218 | .25 | 726 |
| September | 16.68 | 10.29 | 14.30 | .265 | .30 | 851 |
| The period | | | | | | 5,870 |
| October | 72.14 | 9.85 | 13.30 | .246 | .29 | 818 |
| November | 12.69 | 9.90 | 11.20 | .207 | .23 | 666 |
| December | 12.93 | 10.94 | 11.30 | .209 | .24 | 695 |

*Monthly discharge of Lytle Creek at headgates Rialto canals for 1901.*

[Drainage area, 52 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1901.** | | | | | | |
| May | 21.7 | 12.1 | 15.8 | 0.30 | 0.35 | 971 |
| June | 15.2 | 10.5 | 12.6 | .24 | .27 | 750 |
| July 1-23 | | | 10.0 | .19 | .16 | 456 |
| August | 11.3 | 9.7 | 10.4 | .20 | .23 | 639 |
| September | 11.5 | 8.7 | 9.8 | .19 | .21 | 583 |
| October 1-25, 29-31 | | | 12.7 | .24 | .25 | 705 |

## LYTLE CREEK NEAR SAN BERNARDINO, CAL.

This station is located below the junction of the North and Middle forks of Lytle Creek, in the NW. ¼ sec. 26, T. 2 N., R. 6 W., in the Angeles National Forest, about 3 miles above the mouth of the canyon and 14 miles northwest of San Bernardino.

The discharge is obtained by combining the flow in the power canal with the flow over the diverting dam. Flow in the power canal is measured, near the intake, by an 8-foot steel plate rectangular weir. The capacity of the canal is about 23 second-feet. The flow over the diverting dam is approximate. The daily discharge is the mean of two observations recorded each day. No record is given when the flow exceeded 80 second-feet. When the entire flow is diverted into the canal, the results are good; above 23 second-feet they are approximate.

The following records of daily discharge were furnished by the Southern California Edison Co., through H. W. Dennis, construction engineer.

*Daily discharge, in second-feet, of Lytle Creek near San Bernardino, Cal., for 1904–1911.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | | | | | | | | | | |
| 1 | ...... | 5.3 | 8.0 | 9.3 | 12 | 15 | 33 | 50 | 37 | 34 | 29 | 26 | 32 |
| 2 | ...... | 5.2 | 8.3 | 9.6 | 12 | ...... | 33 | 49 | 43 | 34 | 29 | 26 | 32 |
| 3 | ...... | 5.1 | 8.2 | 9.8 | 12 | ...... | 33 | 48 | 38 | 34 | 28 | 26 | 32 |
| 4 | ...... | 7.5 | 8.2 | 9.8 | 12 | ...... | 33 | 48 | 40 | 34 | 28 | 26 | 32 |
| 5 | ...... | 7.6 | 8.5 | 9.6 | 12 | ...... | 33 | 48 | 38 | 33 | 28 | 26 | 32 |
| 6 | ...... | 8.2 | 8.6 | 9.7 | 12 | (a) | 33 | 46 | 38 | 33 | 28 | 26 | 33 |
| 7 | ...... | 8.5 | 8.8 | 9.7 | 11 | 45 | 33 | 46 | 38 | 32 | 28 | 27 | 33 |
| 8 | ...... | 8.6 | 8.7 | 9.7 | 11 | 45 | 32 | 44 | 39 | 32 | 28 | 28 | 34 |
| 9 | ...... | 8.8 | 8.5 | 9.6 | 13 | 40 | 32 | 44 | 38 | 32 | 27 | 28 | 34 |
| 10 | ...... | 8.7 | 8.4 | 9.6 | 15 | 39 | 32 | 44 | 36 | 32 | 27 | 29 | 34 |
| 11 | ...... | 8.6 | 8.4 | 9.6 | 14 | 37 | 33 | 44 | 38 | 32 | 27 | 30 | 35 |
| 12 | ...... | 8.6 | 8.6 | 9.8 | 14 | 36 | (a) | 42 | 38 | 32 | 27 | 30 | 35 |
| 13 | ...... | 8.4 | 8.2 | 9.6 | 14 | 35 | ...... | 42 | 38 | 31 | 26 | 30 | 36 |
| 14 | ...... | 8.3 | 8.8 | 9.6 | 14 | 29 | ...... | 42 | 37 | 31 | 26 | 31 | 36 |
| 15 | ...... | 8.5 | 8.9 | 9.6 | 14 | 37 | (a) | 42 | 37 | 31 | 26 | 31 | 37 |
| 16 | ...... | 8.4 | 8.6 | 9.6 | 16 | ...... | ...... | 40 | 37 | 31 | 26 | 31 | 37 |
| 17 | ...... | 8.4 | 8.9 | 9.6 | 15 | 58 | ...... | 40 | 37 | 31 | 26 | 31 | 38 |
| 18 | 6.8 | 8.4 | 8.8 | 9.6 | 14 | 44 | ...... | 40 | 37 | 30 | 26 | 31 | 38 |
| 19 | 7.2 | 8.2 | 8.5 | 9.6 | 14 | 41 | (a) | 40 | 37 | 30 | 26 | 32 | 38 |
| 20 | 7.2 | 8.3 | 8.6 | 9.6 | 14 | 41 | 75 | 40 | 36 | 30 | 26 | 32 | 38 |
| 21 | 7.0 | 8.4 | 8.6 | 9.6 | 19 | 40 | 70 | 40 | 36 | 30 | 26 | 32 | 39 |
| 22 | 7.7 | 8.4 | 8.8 | 10 | 18 | 38 | 68 | 40 | 36 | 30 | 25 | 32 | 39 |
| 23 | 7.6 | 8.7 | 8.8 | 10 | 17 | 37 | 63 | 39 | 36 | 30 | 25 | 32 | 39 |
| 24 | 9.1 | 7.7 | 9.0 | 10 | 16 | 36 | 58 | 39 | 36 | 30 | 26 | 32 | 39 |
| 25 | 8.0 | 8.0 | 9.2 | 10 | 16 | 34 | 55 | 39 | 35 | 30 | 26 | 32 | 39 |
| 26 | 8.1 | 7.8 | 9.2 | 10 | 16 | 33 | 54 | 38 | 35 | 29 | 26 | 32 | 40 |
| 27 | 7.7 | 7.8 | 9.3 | 10 | 15 | 32 | 53 | 38 | 35 | 29 | 26 | 32 | 39 |
| 28 | 7.6 | 7.8 | 9.3 | 10 | 16 | 32 | 50 | 38 | 35 | 29 | 26 | 32 | 40 |
| 29 | 5.5 | 7.8 | 9.1 | 10 | 15 | ...... | 55 | 38 | 35 | 29 | 26 | 32 | 39 |
| 30 | 5.1 | 7.8 | 9.4 | 10 | 15 | ...... | 51 | 38 | 34 | 29 | 26 | 32 | 39 |
| 31 | ...... | 8.0 | ...... | 14 | 15 | ...... | 48 | ...... | 34 | ...... | 26 | 32 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905–6. | | | | | | | | | | | | |
| 1 | 39 | 38 | 40 | 27 | 25 | 24 | ...... | 65 | 55 | 45 | 51 | 47 |
| 2 | 39 | 38 | 40 | 27 | 24 | 24 | ...... | 64 | 55 | 44 | 51 | 47 |
| 3 | 39 | 38 | 40 | 26 | 24 | 24 | ...... | 65 | 55 | 46 | 51 | 47 |
| 4 | 39 | 38 | 40 | 25 | 24 | 29 | ...... | 64 | 54 | 47 | 51 | 47 |
| 5 | 38 | 40 | 40 | 24 | 24 | 25 | ...... | 62 | 53 | 48 | 51 | 47 |
| 6 | 38 | 38 | 40 | 24 | 25 | 24 | ...... | 63 | 53 | 49 | 51 | 47 |
| 7 | 38 | 40 | 40 | 24 | 24 | 24 | ...... | 62 | 53 | 50 | 51 | 47 |
| 8 | 38 | 42 | 40 | 24 | 23 | 24 | ...... | 62 | 52 | 51 | 51 | 47 |
| 9 | 38 | 38 | 40 | 24 | 23 | 24 | ...... | 60 | 51 | 51 | 51 | 47 |
| 10 | 38 | 38 | 40 | 24 | 24 | 24 | ...... | 59 | 51 | 51 | 51 | 46 |
| 11 | 38 | 38 | 40 | 24 | 24 | 25 | ...... | 59 | 50 | 51 | 51 | 45 |
| 12 | 38 | 38 | 40 | 25 | 23 | ...... | (a) | 58 | 49 | 53 | 50 | 45 |
| 13 | 38 | 39 | 40 | 25 | 23 | ...... | 71 | 59 | 49 | 53 | 49 | 46 |
| 14 | 38 | 39 | 40 | 25 | 23 | ...... | 73 | 57 | 49 | 53 | 48 | 45 |
| 15 | 38 | 39 | 40 | 24 | 24 | ...... | 72 | 57 | 49 | 55 | 49 | 45 |
| 16 | 38 | 40 | 32 | 24 | 24 | ...... | 72 | 57 | 48 | 55 | 49 | 45 |
| 17 | 38 | 40 | 32 | 24 | 23 | ...... | 71 | 56 | 47 | 57 | 49 | 45 |
| 18 | 38 | 39 | 31 | 24 | 24 | ...... | 70 | 55 | 47 | 57 | 49 | 45 |
| 19 | 38 | 39 | 31 | 44 | 24 | ...... | 69 | 55 | 47 | 57 | 49 | 45 |
| 20 | 38 | 42 | 30 | 35 | 24 | ...... | 68 | 55 | 47 | 56 | 49 | 45 |
| 21 | 39 | 40 | 30 | 34 | 25 | ...... | 68 | 55 | 47 | 55 | 49 | 44 |
| 22 | 39 | 40 | 29 | 34 | 25 | ...... | 67 | 53 | 46 | 55 | 49 | 43 |
| 23 | 38 | 40 | 29 | 34 | 24 | ...... | 67 | 53 | 45 | 55 | 49 | 43 |
| 24 | 38 | 40 | 29 | 33 | 24 | ...... | 67 | 53 | 45 | 55 | 49 | 43 |
| 25 | 38 | 40 | 28 | 32 | 24 | ...... | 67 | 53 | 45 | 54 | 49 | 43 |
| 26 | 38 | 40 | 28 | 32 | 24 | ...... | 65 | 56 | 45 | 53 | 49 | 43 |
| 27 | 38 | 42 | 28 | 32 | 24 | ...... | 66 | 57 | 45 | 53 | 48 | 43 |
| 28 | 38 | 41 | 28 | 31 | 25 | ...... | 68 | 62 | 45 | 53 | 47 | 43 |
| 29 | 38 | 40 | 28 | 28 | ...... | ...... | 67 | 59 | 45 | 53 | 47 | 43 |
| 30 | 38 | 40 | 28 | 26 | ...... | ...... | 67 | 58 | 45 | 53 | 47 | 43 |
| 31 | 38 | ...... | 27 | 26 | ...... | ...... | ...... | 56 | ...... | 53 | 47 | ...... |

a Discharge over 80 second-feet at time of one daily observation.

*Daily discharge, in second-feet, of Lytle Creek near San Bernardino, Cal., for 1904–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Sept. | Day. | Oct. | Nov. | Dec. | Jan. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | 1906–7. | | | | | |
| 1 | 43 | 39 | 38 | 68 | ........ | 16 | 41 | 37 | 69 | ........ | 70 |
| 2 | 41 | 39 | 43 | 68 | ........ | 17 | 41 | 37 | 69 | ........ | 65 |
| 3 | 41 | 39 | 47 | 66 | (a) | 18 | 40 | 37 | 65 | ........ | 60 |
| 4 | 41 | 39 | 47 | 66 | 70 | 19 | 39 | 37 | 62 | ........ | 60 |
| 5 | 41 | 39 | 47 | 70 | 70 | 20 | 39 | 37 | 62 | ........ | 60 |
| 6 | 41 | 39 | 45 | 67 | 70 | 21 | 39 | 37 | 61 | ........ | 60 |
| 7 | 41 | 39 | 45 | 74 | 70 | 22 | 39 | 37 | 60 | ........ | 60 |
| 8 | 41 | 39 | 45 | 72 | 70 | 23 | 39 | 37 | 60 | ........ | 60 |
| 9 | 41 | 39 | 45 | (a) | 70 | 24 | 39 | 37 | 60 | ........ | 60 |
| 10 | 41 | 39 | 45 | ........ | 70 | 25 | 39 | 37 | 59 | ........ | 60 |
| 11 | 41 | 39 | 45 | ........ | 70 | 26 | 39 | 37 | 65 | ........ | 60 |
| 12 | 41 | 38 | ........ | ........ | 70 | 27 | 39 | 37 | 68 | ........ | 60 |
| 13 | 41 | 37 | ........ | ........ | 70 | 28 | 39 | 37 | ........ | ........ | 60 |
| 14 | 41 | 37 | ........ | ........ | 70 | 29 | 39 | 37 | 68 | ........ | 60 |
| 15 | 41 | 37 | (a) | ........ | 70 | 30 | 39 | 37 | 68 | ........ | 60 |
| | | | | | | 31 | 39 | ........ | 68 | ........ | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | 21 | 20 | 19 |
| 2 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | 21 | 20 | 19 |
| 3 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | 21 | 20 | 19 |
| 4 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | 22 | 20 | 19 |
| 5 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | 22 | 20 | 19 |
| 6 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | 22 | (b) | 19 |
| 7 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | (b) | (b) | 20 | 19 |
| 8 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | (b) | 19 | 20 |
| 9 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | 21 | 19 | 20 |
| 10 | 60 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | 21 | 19 | 20 |
| 11 | 60 | 55 | 50 | 40 | ....... | 60 | 50 | 50 | 28 | 21 | 19 | 20 |
| 12 | 60 | 50 | 50 | 40 | ....... | 60 | 50 | 50 | 26 | 21 | 19 | 20 |
| 13 | 60 | 50 | 50 | 40 | ....... | 55 | 50 | 50 | 26 | 21 | 19 | 20 |
| 14 | 60 | 50 | 50 | 40 | ....... | 50 | 50 | 50 | 26 | 21 | 19 | 20 |
| 15 | 60 | 50 | 45 | 40 | (a) | 50 | 50 | 50 | 26 | 20 | 19 | 20 |
| 16 | 60 | 50 | 40 | 40 | (a) | 50 | 50 | 50 | 26 | 20 | 19 | 21 |
| 17 | 60 | 50 | 40 | 40 | 60 | 50 | 50 | 50 | 26 | 20 | 19 | 20 |
| 18 | 60 | 50 | 40 | 40 | 60 | 50 | 50 | 50 | 26 | 21 | 19 | 20 |
| 19 | 60 | 50 | 40 | 40 | 60 | 50 | 50 | 40 | 26 | 20 | 19 | 21 |
| 20 | 60 | 50 | 40 | 40 | 60 | 50 | 50 | 40 | 26 | 20 | 19 | 21 |
| 21 | 60 | 50 | 40 | 40 | 60 | 50 | 50 | 40 | 24 | 20 | 19 | 21 |
| 22 | 60 | 50 | 40 | 40 | 60 | 50 | 50 | 40 | 23 | 20 | 19 | 21 |
| 23 | 65 | 50 | 40 | 55 | 60 | 50 | 50 | 40 | 23 | 20 | 19 | 21 |
| 24 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 40 | 23 | 20 | 19 | 22 |
| 25 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 40 | 22 | 20 | 19 | 22 |
| 26 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 40 | 22 | 20 | 19 | 22 |
| 27 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 40 | 22 | 20 | 19 | 22 |
| 28 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 40 | 22 | 20 | 19 | 21 |
| 29 | 60 | 50 | 40 | ....... | 60 | 50 | 50 | 30 | 21 | 20 | 19 | 21 |
| 30 | 60 | 50 | 40 | ....... | ....... | 50 | 50 | 30 | 21 | 20 | 19 | 21 |
| 31 | 60 | ....... | 40 | ....... | ....... | 50 | ....... | 30 | ....... | 20 | 19 | ...... |
| 1908–9. | | | | | | | | | | | | |
| 1 | 21 | 22 | 22 | 20 | 30 | ....... | 43 | 43 | 43 | 33 | 29 | 37 |
| 2 | 22 | 22 | 34 | 20 | 43 | ....... | 43 | 43 | 37 | 33 | 29 | 37 |
| 3 | 22 | 22 | 36 | 20 | 43 | ....... | 43 | 43 | 37 | 33 | 29 | 37 |
| 4 | 22 | 22 | 28 | 20 | 43 | ....... | 43 | 43 | 37 | 33 | 29 | 37 |
| 5 | 22 | 22 | 27 | 20 | 43 | (a) | 43 | 43 | 37 | 33 | 29 | 37 |
| 6 | 22 | 22 | 27 | 20 | 43 | 60 | 43 | 43 | 37 | 33 | 29 | 37 |
| 7 | 21 | 22 | 27 | 20 | (a) | 60 | 43 | 43 | 37 | 33 | 29 | 37 |
| 8 | 21 | 21 | 27 | 19 | ....... | 60 | 43 | 43 | 37 | 33 | 29 | 37 |
| 9 | 21 | 22 | 26 | 21 | ....... | 60 | 43 | 43 | 37 | 31 | 29 | 37 |
| 10 | 21 | 22 | 27 | 20 | ....... | 60 | 43 | 43 | 37 | 29 | 29 | 37 |

a Discharge over 80 second-feet at time of one daily observation.

b No record reported.

*Daily discharge, in second-feet, of Little Creek near San Bernardino, Cal., for 1904–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908-9 | | | | | | | | | | | | |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | 39 | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | 39 | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | 30 | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | 31 | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | ...... | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | ...... | ...... | [illegible] | 43 | 43 | [illegible] | 39 | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | ...... | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | ...... | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 31 | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 43 | [illegible] | 39 | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | [illegible] | [illegible] | 39 | [illegible] | [illegible] |
| 31 | [illegible] | ...... | [illegible] | [illegible] | ...... | 43 | ...... | 43 | ...... | 39 | [illegible] | .... |
| 1909-10. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 35 | 31 | 30 | 30 | 30 | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | ...... | [illegible] | [illegible] | 34 | 31 | 30 | 30 | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | ...... | 61 | 45 | [illegible] | 31 | 30 | 30 | 30 | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | ...... | [illegible] | 79 | [illegible] | 31 | 30 | 30 | 30 | [illegible] |
| 5 | [illegible] | [illegible] | 33 | ...... | 61 | [illegible] | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 6 | 35 | 33 | 33 | ...... | 61 | 37 | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 7 | 34 | 33 | 33 | ...... | 61 | 37 | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 8 | 33 | 33 | 33 | ...... | 61 | 37 | 32 | 31 | 30 | 30 | 30 | [illegible] |
| 9 | 33 | [illegible] | ...... | ...... | 61 | 37 | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 10 | 33 | 35 | 47 | ...... | 61 | 37 | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 11 | 33 | 35 | 38 | ...... | 61 | 36 | 33 | 31 | 31 | 30 | 30 | [illegible] |
| 12 | 33 | 35 | [illegible] | ...... | 61 | 35 | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 13 | 33 | 35 | 37 | ...... | 61 | 35 | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 14 | 33 | 39 | 37 | ...... | 61 | 35 | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 15 | 33 | 37 | 37 | ...... | 61 | 35 | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 16 | 33 | 37 | 37 | ...... | 61 | 35 | 33 | 31 | 30 | 30 | 30 | [illegible] |
| 17 | 33 | 37 | 37 | ...... | 61 | 35 | 33 | 31 | 29 | 30 | 30 | [illegible] |
| 18 | 33 | 34 | 37 | [illegible] | 61 | 33 | 33 | 31 | 29 | 30 | 30 | [illegible] |
| 19 | 33 | 33 | 37 | [illegible] | 61 | 35 | 33 | 31 | 29 | 30 | 28 | [illegible] |
| 20 | 33 | 33 | 37 | 63 | 61 | 35 | 33 | 31 | 29 | 30 | 28 | [illegible] |
| 21 | 33 | 33 | 40 | 63 | 61 | 35 | 33 | 31 | 29 | 30 | [illegible] | [illegible] |
| 22 | 33 | 33 | 37 | 63 | 61 | 35 | 33 | 31 | 30 | 30 | [illegible] | [illegible] |
| 23 | 33 | 33 | 37 | 63 | 61 | 35 | 33 | 31 | 30 | 30 | [illegible] | [illegible] |
| 24 | 33 | 33 | 36 | 63 | 61 | 34 | 33 | 31 | 30 | 30 | [illegible] | [illegible] |
| 25 | 33 | 33 | 35 | 63 | 61 | 33 | 32 | 31 | 30 | 30 | [illegible] | [illegible] |
| 26 | 33 | 35 | 35 | 63 | 61 | 33 | 31 | 31 | 30 | 30 | [illegible] | [illegible] |
| 27 | 33 | 34 | 35 | 63 | 61 | 36 | 31 | 31 | 30 | 30 | [illegible] | [illegible] |
| 28 | 33 | 33 | 35 | 63 | 61 | 39 | 31 | 31 | 30 | 30 | [illegible] | [illegible] |
| 29 | 33 | 33 | 35 | 62 | ...... | 37 | 31 | 31 | 30 | 30 | [illegible] | [illegible] |
| 30 | 33 | 33 | 34 | 61 | ...... | 35 | 31 | 30 | 28 | 30 | [illegible] | [illegible] |
| 31 | 33 | ...... | ...... | 61 | ...... | 35 | ...... | 30 | ...... | 30 | [illegible] | .... |
| 1910-11. | | | | | | | | | | | | |
| 1 | 27 | 24 | 23 | 21 | 43 | 35 | ...... | ...... | 73 | 46 | 34 | [illegible] |
| 2 | 27 | 24 | 23 | 21 | 43 | 35 | ...... | (a) | 73 | 46 | 34 | [illegible] |
| 3 | 27 | 24 | 22 | 21 | 43 | (a) | ...... | 73 | 72 | 46 | 34 | [illegible] |
| 4 | 27 | 24 | 22 | 21 | ...... | ...... | ...... | 73 | 72 | 46 | 34 | [illegible] |
| 5 | 27 | 24 | 22 | 21 | (a) | ...... | ...... | 73 | 72 | 42 | 34 | [illegible] |
| 6 | 27 | 24 | 22 | 21 | 52 | ...... | ...... | 73 | 72 | 42 | 34 | [illegible] |
| 7 | 27 | 24 | 22 | 21 | 52 | ...... | ...... | 73 | 72 | 42 | 33 | [illegible] |
| 8 | 26 | 24 | 22 | 21 | 53 | ...... | ...... | 73 | 72 | 42 | 32 | [illegible] |
| 9 | 26 | 24 | 22 | 22 | 53 | ...... | ...... | 73 | 72 | 42 | 32 | [illegible] |
| 10 | 26 | 24 | 22 | ...... | 53 | ...... | ...... | 73 | 67 | 42 | 32 | [illegible] |

a Discharge over [illegible] second-feet at time of one daily observation. b No record reported.

*Daily discharge, in second-feet, of Lytle Creek near San Bernardino, Cal., for 1904–1911—*Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 11 | 26 | 24 | 22 | 30 | 53 | ...... | ...... | 73 | 62 | 42 | 32 | 32 |
| 12 | 26 | 24 | 22 | 32 | 53 | ...... | ...... | 73 | 62 | 42 | 32 | 32 |
| 13 | 26 | 24 | 22 | 31 | 53 | ...... | ...... | 73 | 62 | 40 | 32 | 32 |
| 14 | 26 | 24 | 22 | 31 | 53 | ...... | ...... | 73 | 62 | 38 | 32 | 32 |
| 15 | 26 | 24 | 22 | ...... | 53 | ...... | ...... | 73 | 62 | 38 | 32 | 32 |
| 16 | 26 | 24 | 22 | 43 | 53 | ...... | ...... | 73 | 62 | 38 | 32 | 32 |
| 17 | 26 | 24 | 22 | 38 | 53 | ...... | ...... | 73 | 62 | 38 | 32 | 32 |
| 18 | 26 | 24 | 22 | 33 | 53 | ...... | ...... | 73 | 62 | 38 | 32 | 32 |
| 19 | 26 | 24 | 22 | 32 | 53 | ...... | ...... | 73 | 62 | 38 | 32 | 32 |
| 20 | 26 | 23 | 22 | 32 | 53 | ...... | ...... | 73 | 62 | 38 | 32 | 32 |
| 21 | 26 | 23 | 22 | 33 | 53 | ...... | ...... | 73 | 62 | 38 | 32 | 32 |
| 22 | 26 | 23 | 22 | 31 | 53 | ...... | ...... | 73 | 60 | 37 | 32 | 32 |
| 23 | 26 | 23 | 21 | 29 | 53 | ...... | ...... | 73 | 58 | 36 | 32 | 32 |
| 24 | 26 | 23 | 21 | 32 | 53 | ...... | ...... | 73 | 58 | 36 | 32 | 32 |
| 25 | 26 | 23 | 21 | 53 | 53 | ...... | ...... | 73 | 55 | 36 | 32 | 32 |
| 26 | 26 | 23 | 21 | 43 | 53 | ...... | ...... | 73 | 52 | 36 | 32 | 32 |
| 27 | 26 | 23 | 21 | 43 | 53 | ...... | ...... | 73 | 52 | 36 | 32 | 32 |
| 28 | 25 | 23 | 21 | ...... | 53 | ...... | ...... | 73 | 52 | 36 | 32 | 33 |
| 29 | 24 | 23 | 21 | ...... | ...... | ...... | ...... | 73 | 52 | 36 | 32 | 38 |
| 30 | 24 | 23 | 21 | 53 | ...... | ...... | ...... | 73 | 40 | 36 | 32 | 40 |
| 31 | 24 | ...... | 21 | (a) | ...... | ...... | ...... | 73 | ...... | 34 | 32 | ...... |

a Discharge over 80 second-feet at time of one daily observation.

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | 1911. | | | | 1911. | | | |
| 1 | 38 | 36 | 30 | 11 | 38 | 32 | 30 | 21 | 36 | 30 | 30 |
| 2 | 38 | 34 | 30 | 12 | 38 | 32 | 30 | 22 | 36 | 30 | 30 |
| 3 | 38 | 32 | 30 | 13 | 38 | 32 | 30 | 23 | 36 | 30 | 30 |
| 4 | 38 | 32 | 30 | 14 | 38 | 32 | 30 | 24 | 36 | 30 | 30 |
| 5 | 38 | 32 | 30 | 15 | 38 | 31 | 30 | 25 | 36 | 30 | 29 |
| 6 | 38 | 32 | 30 | 16 | 38 | 30 | 30 | 26 | 36 | 30 | 28 |
| 7 | 38 | 32 | 30 | 17 | 36 | 30 | 30 | 27 | 36 | 30 | 28 |
| 8 | 38 | 32 | 30 | 18 | 36 | 30 | 30 | 28 | 36 | 30 | 28 |
| 9 | 38 | 32 | 30 | 19 | 36 | 30 | 30 | 29 | 36 | 30 | 28 |
| 10 | 38 | 32 | 30 | 20 | 36 | 30 | 30 | 30 | 36 | 30 | 28 |
| | | | | | | | | 31 | 36 | ...... | 28 |

NOTE.—For days on which no record is given, and not otherwise noted, the discharge was over 80 second-feet.

*Monthly discharge of [illegible] Creek near San Bernardino, Cal., for 1904–1911*

| Month. | Discharge in second-feet. | | | Run-off in acre-feet. |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1904.** | | | | |
| September 13–30 | [illegible] | [illegible] | [illegible] | [illegible] |
| **1904–5.** | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | 1 | [illegible] | [illegible] |
| February [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | 34 | [illegible] | [illegible] |
| June | 54 | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | 32 | [illegible] | [illegible] |
| **1905–6.** | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] |
| March [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | 46 | 48.9 | [illegible] |
| July | [illegible] | 44 | 52.3 | [illegible] |
| August | 51 | 47 | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] |
| **1906–7.** | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | 37 | [illegible] | [illegible] |
| December [illegible] | [illegible] | [illegible] | 56.0 | [illegible] |
| January [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February | (a) | (a) | | |
| March | (a) | (a) | | |
| April | (a) | (a) | | |
| May | (a) | (a) | | |
| June | (a) | (a) | | |
| July | (a) | (a) | | |
| August | (a) | (a) | | |
| September [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| **1907–8.** | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| January [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | 54.0 | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] |
| June [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August [illegible] | [illegible] | 19 | [illegible] | [illegible] |
| September | [illegible] | 19 | [illegible] | [illegible] |
| **1908–9.** | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| January [illegible] | [illegible] | 19 | 27.9 | [illegible] |
| February [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | 37 | 37.2 | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | 32.5 | [illegible] |
| September | 37 | [illegible] | [illegible] | [illegible] |

a Discharge greater than [illegible] second-feet.

*Monthly discharge of Lytle Creek near San Bernardino, Cal., for 1904–1911*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1909–10.** | | | | |
| October | 37 | 33 | 33.5 | 2,060 |
| November | 39 | 33 | 34.1 | 2,030 |
| December 3–6, 10–11, 13–30 | 47 | 33 | 36.1 | 1,860 |
| January 19–31 | 63 | 58 | 62.2 | 1,600 |
| February | 61 | 61 | 61.0 | 3,390 |
| March | 61 | 33 | 37.4 | 2,300 |
| April | 35 | 31 | 32.7 | 1,950 |
| May | 31 | 30 | 30.9 | 1,900 |
| June | 31 | 23 | 29.6 | 1,760 |
| July | 30 | 30 | 30.0 | 1,840 |
| August | 30 | 28 | 29.2 | 1,800 |
| September 1–6, 8–30 | 28 | 27 | 27.3 | 1,570 |
| **1910–11.** | | | | |
| October | 27 | 24 | 26.0 | 1,600 |
| November | 24 | 23 | 23.6 | 1,400 |
| December | 23 | 21 | 21.8 | 1,340 |
| January 1–9, 11, 14, 16–27, 30 | 53 | 21 | 31.1 | 1,600 |
| February 1–3, 6–28 | 53 | 43 | 51.8 | 2,670 |
| March | (a) | 55 | (a) | ........ |
| April | (a) | (a) | (a) | ........ |
| May 3–31 | 73 | 73 | 73.0 | 4,200 |
| June | 73 | 49 | 64.5 | 3,840 |
| July | 46 | 34 | 39.5 | 2,430 |
| August | 34 | 32 | 32.4 | 1,990 |
| September | 40 | 32 | 32.5 | 1,930 |
| **1911.** | | | | |
| October | 38 | 36 | 37.0 | 2,280 |
| November | 36 | 30 | 31.2 | 1,860 |
| December | 30 | 28 | 29.6 | 1,820 |

a Discharge greater than 80 second-feet.

NOTE.—Monthly values computed by engineers of the United States Geological Survey.

## TEMESCAL CREEK NEAR RINCON, CAL.

This stream rises in the extreme southwestern corner of Riverside County. Its smaller tributaries have their sources on the eastern slope of the Santa Ana Mountains. The river flows in a general northerly direction, entering Santa Ana River 2½ miles above Rincon and just above the lower narrows of the Santa Ana. San Jacinto River discharges into Lake Elsinore. During years of heavy rainfall this lake overflows and the surplus water finds its way into Temescal Creek. During the last few years, however, there has been no such discharge from Lake Elsinore. The water of Temescal Creek and of its tributary, Coldwater Creek, is used for irrigation in the vicinity of Corona. A series of measurements of Temescal and Coldwater creeks have been made by F. Rolfe, and are given below.

During the recent dry years there has been no surface flow of Temescal Creek. The water flowing in the upper pipe line of the Temescal Land & Water Co. includes the principal part of the flow of Coldwater Creek and Temescal Hot Springs, augmented by water pumped from wells in Temescal Valley.

*Discharge measurements of [illegible] Creek [illegible] Temescal Canyon, Riverside County, Cal.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
| --- | --- | --- | --- | --- | --- |
| [illegible] | | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Discharge measurements of [illegible] Creek [illegible] Temescal Canyon, Riverside County, Cal.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
| --- | --- | --- | --- | --- | --- |
| [illegible] | | [illegible] | [illegible] | | [illegible] |
| Jan. [illegible] | [illegible] | [illegible] | Apr. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | May [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | [illegible] | [illegible] | June [illegible] | do. | [illegible] |
| Mar. [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | [illegible] | [illegible] | July [illegible] | do. | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | do. | [illegible] |

## [illegible] CREEK.

*Discharge measurements of [illegible] Creek, Riverside County, [illegible]*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
| --- | --- | --- | --- | --- | --- |
| [illegible] | | [illegible] | [illegible] | | [illegible] |
| Jan. [illegible] | [illegible] | [illegible] | Apr. [illegible] | [illegible] | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | do. | [illegible] |
| Feb. [illegible] | do. | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | do. | [illegible] | May [illegible] | do. | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | do. | [illegible] |
| Mar. [illegible] | do. | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | do. | [illegible] |
| [illegible] | do. | [illegible] | June [illegible] | do. | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | do. | [illegible] |

## CUCAMONGA AND SAN ANTONIO CREEKS.

Cucamonga and San Antonio creeks rise in the San Antonio Mountains, Sierra Madre, and flow southward into the Santa Ana Valley, where they are lost in the sand.

*Discharge measurements of Cucamonga Creek, San Bernardino County, Cal.*

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-feet.* |
| Aug. 26, 1898 | F. H. Olmsted | Head works in canyon | 1.04 |
| July 11, 1900 | S. G. Bennett | do | 1.08 |
| Oct. 7, 1901 | do | do | 2.06 |
| Apr. 3, 1902 | do | do | 4.80 |
| Apr. 21, 1903 | Clapp and Clausen | At mouth of canyon | 1.5 |
| Do | do | Southern California Railway | .8 |
| May 25, 1903 | W. B. Clapp | Mouth of canyon | 5.5 |
| Do | do | Base line avenue | .6 |
| Sept. 13, 1903 | do | Above head works of Hermosa Water Co. | 3.6 |
| Sept. 23, 1904 | do | Point of diversion of Cucamonga Water Co. | 1.8 |

*Discharge measurements of tributaries of Cucamonga Creek around Red Hill, Cal.*

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-feet.* |
| Sept. 9, 1898 | O. J. Sutton | Springs | 2.20 |
| Do | do | Tunnel | 2.80 |
| Do | do | Artesian wells | 1.80 |
| **Total** | | | 6.80 |
| Aug. 29, 1899 | S. G. Bennett | From Stowell wells to Ontario | 2.48 |
| July 11, 1900 | do | East side | 4.00 |
| Do | do | West side | 2.97 |
| Do | do | San Antonio water, Haskell well | 2.11 |
| Do | do | Sixteenth Street well | 1.72 |
| **Total from Red Hills.** | | | 10.85 |

*Discharge measurements of San Antonio Creek, San Bernardino County, Cal.*

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-feet.* |
| July 23, 1896 | J. H. Quinton | Mouth of canyon | 7.9 |
| Do | do | Ontario water from tunnel | 1.88 |
| July 2, 1898 | F. H. Olmsted | Mouth of canyon | 6.59 |
| Do | do | In creek at Pierce's camp | 3.36 |
| Aug. 26, 1898 | do | Division weir | 5.18 |
| Aug. 25, 1899 | S. G. Bennett | Mouth of canyon | 4.48 |
| July 11, 1900 | do | do | 4.07 |
| Sept. 25, 1900 | W. W. Cockins, jr | Division weir | 3.72 |
| Oct. 7, 1900 | S. G. Bennett | do | 2.80 |
| Apr. 3, 1902 | do | do | 11.4 |
| Apr. 1, 1903 | W. B. Clapp | Mouth of canyon | 854 |
| Do | Clapp and Clausen | do | 57 |
| Do | do | 1 mile below Southern Pacific Railway | 70 |
| May 25, 1903 | W. B. Clapp | Mouth of canyon | 54 |
| Do | do | Southern Pacific Railway | 11 |
| July 3, 1903 | do | Mouth of canyon | 10.5 |
| Sept. 13, 1903 | do | do | 11 |
| Sept. 23, 1904 | do | do | 6.8 |
| **1902.** | | | |
| June [illegible] | J. B. Lippincott | Baby Ruth weir | 7.00 |
| July 12, 11.40 a. m. | do | do | 6.88 |
| 12, 1.15 p. m. | do | do | 6.58 |
| Aug. 2, 11.15 a. m. | do | do | 6.15 |
| 9, 11 a. m. | do | do | 6.15 |
| 9, 1.12 p. m. | do | do | 5.90 |
| 2[illegible], 11.45 a. m. | do | do | 5.61 |
| Sept. 29, 12.30 p. m. | do | do | 4.88 |
| [illegible] 15, 12.20 p. m. | do | do | 4.74 |

Discharge measurements of San Antonio Creek, San Bernardino County, Cal.—Cont'd.

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| 1902. | | | Sec.-feet. |
| June [illegible] | [illegible] | Division weir | [illegible] |
| 3 | do | Last weir | [illegible] |
| | | | [illegible] |
| July [illegible] | do | Division weir | [illegible] |
| [illegible] | do | Last weir | [illegible] |
| | | | [illegible] |
| [illegible] | do | Division weir | [illegible] |
| [illegible] | do | Last weir | [illegible] |
| | | | [illegible] |
| Aug. [illegible] | do | Division weir | [illegible] |
| | do | Last weir | [illegible] |
| | | | [illegible] |
| [illegible] | do | Division weir | [illegible] |
| | do | Last weir | [illegible] |
| | | | [illegible] |
| [illegible] | do | Division weir | [illegible] |
| [illegible] | do | Last weir | [illegible] |
| | | | [illegible] |
| [illegible] | do | Division weir | [illegible] |
| [illegible] | do | Last weir | [illegible] |
| | | | [illegible] |
| [illegible] | do | Division weir | [illegible] |
| [illegible] | do | Last weir | [illegible] |
| | | | [illegible] |
| [illegible] | do | Division weir | [illegible] |
| [illegible] | do | Last weir | [illegible] |
| | | | [illegible] |
| Sept. [illegible] | do | Division weir | [illegible] |
| [illegible] | do | Last weir | [illegible] |
| | | | [illegible] |
| [illegible] | do | Division weir | [illegible] |
| [illegible] | do | Last weir | [illegible] |
| | | | [illegible] |
| Oct. [illegible] | do | Division weir | [illegible] |
| [illegible] | do | Last weir | [illegible] |
| | | | [illegible] |
| June [illegible] | do | Fountain of Life spring—weir measurement | [illegible] |
| July [illegible] | do | do | [illegible] |
| Aug. [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| Sept. [illegible] | do | do | [illegible] |
| Oct. [illegible] | do | do | [illegible] |
| June [illegible] | do | San Antonio conduit—weir measurement | [illegible] |
| July [illegible] | do | do | [illegible] |
| Aug. [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| Sept. [illegible] | do | do | [illegible] |
| June [illegible] | do | San Gabriel Electric Co.'s power house—concrete weir basin—weir measurement | [illegible] |
| July [illegible] | do | do | [illegible] |
| Aug. [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| [illegible] | do | do | [illegible] |
| Sept. [illegible] | do | do | [illegible] |
| Oct. [illegible] | do | do | [illegible] |

*Discharge measurements of San Antonio Creek, San Bernardino County, Cal.*—Contd.

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| 1902. | | | *Sec.-feet.* |
| June 28 | J. B. Lippincott | San Gabriel Electric Co.'s power house—weir measurement in creek. | 0.53 |
| July 12, 12.23 p. m. | do | do | .47 |
| Aug. 2, 12.10 p. m. | do | do | .40 |
| 9, 12.11 p. m. | do | do | .40 |
| 28, 12.40 p. m. | do | do | .33 |
| Sept. 27, 12 m. | do | do | .38 |
| Oct. 18, 12 m. | do | do | .39 |
| Aug. 2, 11.45 a. m. | do | Spring Hill weir | 6.31 |
| 9, 11.22 a. m. | do | do | 6.36 |
| 9, 1 p. m. | do | do | 5.88 |
| 28, 12.07 p. m. | do | do | 5.50 |
| 29, 12.10 p. m. | do | do | 5.40 |
| Sept. 27, 12.05 p. m. | do | do | 5.28 |
| Oct. 18, 12.12 p. m. | do | do | 5.01 |

*Weir measurements of San Antonio Creek at division dam, California, 1889–1891.*

[Measurements by F. E. Trask.]

| Date. | Discharge. | Date. | Discharge. |
|---|---|---|---|
| 1889. | *Second-feet.* | 1890. | *Second-feet.* |
| July 15 | 20.56 | Aug. 1 | 33.08 |
| Aug. 1 | 18.00 | 15 | 26.76 |
| 15 | 16.40 | Sept. 1 | 22.14 |
| Sept. 2 | 16.24 | 15 | 18.92 |
| 16 | 13.96 | | |
| Oct. 1 | 13.32 | 1891. | |
| 17 | 13.94 | July 15 | 20.10 |
| Nov. 2 | 23.70 | Aug. 1 | 16.67 |
| Dec. 2 | 33.02 | 15 | 16.26 |
| | | Sept. 13 | 12.26 |
| 1890. | | | |
| July 15 | 37.71 | | |

*Weir measurements of San Antonio Creek at division box, California, 1892–1903.*

[Measurements by F. E. Trask.]

| Date. | Discharge. | Date. | Discharge. |
|---|---|---|---|
| 1892. | *Second-feet.* | 1897. | *Second-feet.* |
| July 15 | 12.50 | Sept. 20 | 9.24 |
| Sept. 15 | 8.16 | | |
| Nov. 19 | 7.09 | 1898. | |
| | | July 5 | 5.24 |
| 1893. | | Aug. 1 | 4.72 |
| Aug. 14 | 14.30 | Sept. 5 | 4.24 |
| 30 | 12.72 | | |
| Sept. 25 | 12.16 | 1899. | |
| Oct. 25 | 10.84 | July 3 | 2.98 |
| | | Aug. 7 | 3.88 |
| 1894. | | Sept. 2 | 4.06 |
| July 16 | 6.00 | | |
| | | 1900. | |
| 1895. | | July 1 | 4.36 |
| July 15 | 18.48 | Aug. 6 | 3.54 |
| Aug. 22 | 16.78 | Sept. 1 | 3.22 |
| Sept. 7 | 14.20 | | |
| | | 1902. | |
| 1896. | | July 21 | 5.30 |
| June 25 | 6.58 | Aug. 16 | 4.22 |
| July 15 | 5.20 | Sept. 13 | 3.40 |
| Sept. 15 | 5.44 | | |
| | | 1903. | |
| 1897. | | Aug. 10 | 9.40 |
| July 6 | 17.24 | 16 | 7.66 |
| Aug. 16 | 10.82 | | |

July 18, 1898, float measurement by F. E. Trask showed 22.12 second-feet discharge for entire creek above division. (Excludes Gird water=0.4 second-feet. Gird water purchased by the San Antonio Water Co., May, 1896, and diverted above division weir.)

[illegible] 1888–[illegible]

[illegible]

| Date | Discharge | Date | Discharge |
|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] |

## CHINO CREEK AT [illegible], CAL.

San Antonio Creek discharges from the southern slope of the Sierra Madre upon a large bed of sand and gravel. The underground water [illegible] to the south, and begin to appear again in the channel of what is known as Chino Creek. This creek enters Santa Ana River just before [illegible] passes through its lower canyon in the Coast Range. The discharge of Chino Creek is very constant, [illegible] of its supply, and hence water rights along its course [illegible] on account of their permanency. A series of measurements of the supply of this creek have been made and are published herewith. There was no gage rod, owing to the shifting nature of the bed.

*Discharge measurements of Chino Creek near Rincon, Cal., in 1898-1907.*

| Date. | Hydrographer. | Discharge. |
|---|---|---|
| 1898. | | *Sec.-feet.* |
| Aug. 30 | F. H. Olmsted | 4.95 |
| 1899. | | |
| May 2 | F. Rolfe | 12.8 |
| 15 | do | 8.64 |
| June 3 | do | 17.0 |
| 15 | do | 5.63 |
| July 4 | do | 3.02 |
| 17 | do | 4.68 |
| Aug. 1 | do | 7.49 |
| 15 | do | 2.14 |
| 29 | do | 3.19 |
| Sept. 13 | J. B. Lippincott | 3.53 |
| 29 | do | 3.88 |
| Oct. 25 | do | 14.5 |
| 26 | F. Rolfe | 14.5 |
| Nov. 18 | do | 20.1 |
| 1900. | | |
| Jan. 18 | F. Rolfe | 24.1 |
| 29 | do | 27.0 |
| Feb. 21 | do | 13.4 |
| Apr. 17 | W. P. Searcy | 8.8 |
| June 24 | do | 4.0 |
| July 7 | do | 2.1 |
| 28 | S. G. Bennett | 2.2 |
| Aug. 15 | W. P. Searcy | 1.1 |
| Sept. 3 | do | 0 |
| Oct. 5 | W. W. Cockins, jr | 5.0 |
| 16 | W. P. Searcy | .4 |
| Nov. 5 | do | 14.4 |
| Dec. 4 | do | 17.1 |
| 31 | do | 16.6 |
| 1901. | | |
| Aug. 31 | J. B. Lippincott | 2.8 |
| 1903. | | |
| Mar. 31 | W. B. Clapp | 146 |
| Apr. 29 | O. W. Peterson | 23 |
| May 18 | W. B. Clapp | 15 |
| June 12 | do | 6.5 |
| July 23 | do | 3.4 |
| Aug. 19 | do | 2.4 |
| Sept. 23 | do | 3.3 |
| Oct. 30 | do | 6 |
| Nov. 25 | do | 9.2 |
| 1904. | | |
| Jan. 26 | W. B. Clapp | 14.7 |
| Feb. 29 | do | 24 |
| Mar. 21 | Clapp and Murphy | 16 |
| Apr. 29 | W. B. Clapp | 15 |
| May 23 | do | 4.3 |
| June 20 | Clapp and Hardy | 2 |
| July 23 | E. C. La Rue | 1.5 |
| Aug. 26 | do | 1.6 |
| Sept. 26 | W. B. Clapp | 2.8 |
| 28 | E. C. La Rue | 3.6 |
| Oct. 22 | do | 5.6 |
| Nov. 19 | do | 8.3 |
| Dec. 10 | do | 8.7 |
| 1905. | | |
| Feb. 24 | | 46 |
| Apr. 17 | | 26 |
| May 16 | | 17 |
| June 6 | | 6 |
| July 29 | | 1.1 |
| Sept. 21 | | 1.9 |
| 1906. | | |
| June 25 | | 3.9 |
| Aug. 31 | | 2.6 |
| Nov. 7 | | 10.3 |
| 1907. | | |
| Aug. 23 | | 2.6 |

## RETURN WATERS IN SAN BERNARDINO COUNTY.

*Natural flow, in second-feet, of return water compared with developed water in San Bernardino Valley above Colton, Cal.*

[By E. Sanborn, engineer Riverside Water Co.]

| Date. | Location. | Developed. | Natural. | Total. |
|---|---|---|---|---|
| | | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Sept. 4, 1903 | Barnhill pumping plant | 0.80 | | 0.80 |
| May 12, 1904 | do | .85 | | .85 |
| Aug. 15, 1904 | do | .77 | | .77 |
| June 9, 1905 | do | 1.10 | | 1.10 |
| Sept. 27, 1905 | do | .80 | | .80 |
| June 23, 1906 | do | 1.30 | | 1.30 |
| Aug. 27, 1906 | do | 1.50 | | 1.50 |
| June 25, 1907 | do | 1.70 | | 1.70 |
| Sept. 18, 1907 | do | 1.30 | | 1.30 |
| June —, 1898 | Beam ditch | | 0.67 | .67 |
| Sept. —, 1898 | do | | .65 | .65 |
| Mar. —, 1899 | do | | .72 | .72 |
| June —, 1899 | do | | .52 | .52 |
| Aug. —, 1899 | do | | .40 | .40 |
| Mar. —, 1900 | do | | .68 | .68 |
| June —, 1900 | do | | .50 | .50 |
| Sept. —, 1900 | do | | .35 | .35 |
| Oct. 13, 1902 | do | | .22 | .22 |
| Aug. 17, 1903 | do | | .08 | .08 |
| June 4, 1904 | do | | .02 | .02 |
| Aug. 20, 1904 | do | | .00 | .00 |
| June 10, 1905 | do | | .00 | .00 |
| Sept. 2, 1905 | do | | .00 | |

[illegible] in second-feet, of [illegible] water [illegible] with developed water in San Bernardino [illegible] above Colton, Cal.—Continued.

| Date. | Location. | Developed. | Natural. | Total. |
|---|---|---|---|---|
| | | Sec.-ft. | Sec.-ft. | Sec.-ft. |
| June [illegible] | [illegible] | .......... | .[illegible] | [illegible] |
| Aug. [illegible] | do | .......... | .[illegible] | [illegible] |
| June [illegible] | do | .......... | .[illegible] | [illegible] |
| Sept. [illegible] | do | .......... | .[illegible] | [illegible] |
| June —, [illegible] | Bloomington pumping plant | [illegible] | .......... | [illegible] |
| Sept. —, [illegible] | do | [illegible] | .......... | [illegible] |
| Mar. —, [illegible] | do | [illegible] | .......... | [illegible] |
| June —, [illegible] | do | [illegible] | .......... | [illegible] |
| Aug. —, [illegible] | do | [illegible] | .......... | [illegible] |
| Mar. —, [illegible] | do | [illegible] | .......... | [illegible] |
| June —, [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. —, [illegible] | do | [illegible] | .......... | [illegible] |
| [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. [illegible] | do | [illegible] | .......... | [illegible] |
| May [illegible] | do | [illegible] | .......... | [illegible] |
| Aug. [illegible] | do | 5.61 | .......... | [illegible] |
| June [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. [illegible] | do | [illegible] | .......... | [illegible] |
| June [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. [illegible] | do | [illegible] | .......... | [illegible] |
| June [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. [illegible] | Brown tract, [illegible] well | [illegible] | .......... | [illegible] |
| June —, [illegible] | [illegible] ditch | [illegible] | .......... | [illegible] |
| Sept. —, [illegible] | do | [illegible] | .......... | [illegible] |
| Mar. —, [illegible] | do | [illegible] | .......... | [illegible] |
| June —, [illegible] | do | [illegible] | .......... | [illegible] |
| Aug. —, [illegible] | do | [illegible] | .......... | [illegible] |
| Mar. —, [illegible] | do | [illegible] | .......... | [illegible] |
| June —, [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. —, [illegible] | do | [illegible] | .......... | [illegible] |
| Oct. [illegible] | do | [illegible] | .......... | [illegible] |
| Aug. 22, [illegible] | do | [illegible] | .......... | [illegible] |
| June 4, [illegible] | do | [illegible] | .......... | [illegible] |
| Aug. [illegible] | do | 2.00 | .......... | [illegible] |
| May [illegible] | do | 2.00 | .......... | [illegible] |
| Aug. [illegible] | do | [illegible] | .......... | [illegible] |
| June 30, [illegible] | do | 2.70 | .......... | [illegible] |
| Sept. [illegible] | do | [illegible] | .......... | [illegible] |
| June [illegible] | do | .......... | 4.40 | [illegible] |
| Sept. 25, [illegible] | do | 3.10 | .......... | [illegible] |
| Aug. [illegible] | [illegible] pumping plant | .72 | .......... | [illegible] |
| June [illegible] | do | .72 | .......... | [illegible] |
| Aug. [illegible] | do | [illegible] | .......... | [illegible] |
| June [illegible] | do | [illegible] | .......... | [illegible] |
| Aug. 24, [illegible] | do | .70 | .......... | [illegible] |
| June 22, [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. [illegible] | Citizens Water Co. pumping plant | [illegible] | .......... | [illegible] |
| June 25, [illegible] | do | 4.00 | .......... | [illegible] |
| Sept. [illegible] | do | 2.00 | .......... | [illegible] |
| May [illegible] | City of San Bernardino | [illegible] | [illegible] | [illegible] |
| Aug. [illegible] | do | 1.02 | 1.70 | [illegible] |
| June [illegible] | City of San Bernardino, Lytle Creek | .......... | [illegible] | [illegible] |
| Sept. [illegible] | do | .......... | [illegible] | [illegible] |
| June [illegible] | do | .......... | [illegible] | [illegible] |
| Sept. [illegible] | do | .......... | [illegible] | [illegible] |
| June [illegible] | City of San Bernardino, Sixth Street pumping plant | [illegible] | .......... | [illegible] |
| Sept. [illegible] | do | [illegible] | .......... | [illegible] |
| June [illegible] | do | 2.00 | .......... | [illegible] |
| Oct. [illegible] | do | [illegible] | .......... | [illegible] |
| June [illegible] | do | 4.00 | .......... | [illegible] |
| Sept. [illegible] | do | [illegible] | .......... | [illegible] |
| June, [illegible] | City of Colton pumping plant (total) | [illegible] | .......... | [illegible] |
| Sept., [illegible] | do | 7.40 | .......... | [illegible] |
| Mar., [illegible] | do | 3.20 | .......... | [illegible] |
| June, [illegible] | do | 5.40 | .......... | [illegible] |
| Aug., [illegible] | do | [illegible] | .......... | [illegible] |
| Mar., [illegible] | do | [illegible] | .......... | [illegible] |
| June, [illegible] | do | [illegible] | .......... | [illegible] |
| Sept., [illegible] | do | 3.54 | .......... | [illegible] |
| Oct. 7, [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. 4, [illegible] | do | [illegible] | .......... | [illegible] |
| May [illegible], [illegible] | do | [illegible] | .......... | [illegible] |
| Aug. 19, [illegible] | do | [illegible] | .......... | [illegible] |
| June 9, [illegible] | do | [illegible] | .......... | [illegible] |
| Sept. 27, [illegible] | do | 2.70 | .......... | [illegible] |
| June 19, [illegible] | do | [illegible] | .......... | [illegible] |
| Aug. 27, [illegible] | do | [illegible] | .......... | [illegible] |

*Natural flow in second-feet of return water compared with developed water in San Bernardino Valley above Colton, Cal.*—Continued.

| Date | Location | Developed. | Natural. | Total. |
|---|---|---|---|---|
| | | Sec.-ft. | Sec.-ft. | Sec.-ft. |
| June [illegible] | City of Colton pumping plant (total) | [illegible] | | 4.50 |
| Sept. [illegible] | do | [illegible] | | 4.50 |
| June — | City of Colton (water used for irrigation) | [illegible] | | 1.97 |
| Sept. — | do | [illegible] | | 1.62 |
| Mar. — | do | [illegible] | | [illegible] |
| June — | do | [illegible] | | [illegible] |
| Aug. — | do | [illegible] | | [illegible] |
| Mar. — | do | [illegible] | | [illegible] |
| June — | do | [illegible] | | [illegible] |
| Sept. — | do | [illegible] | | [illegible] |
| Oct. 7 | do | [illegible] | | [illegible] |
| Sept. 27 | do | [illegible] | | [illegible] |
| June [illegible] | do | [illegible] | | [illegible] |
| Aug. [illegible] | do | [illegible] | | [illegible] |
| June [illegible] | do | [illegible] | | [illegible] |
| Sept. [illegible] | do | [illegible] | | [illegible] |
| Sept. 7 | Cooley tract, artesian well | [illegible] | | [illegible] |
| June — | Daley ditch | | [illegible] | [illegible] |
| Sept. — | do | | [illegible] | [illegible] |
| Mar. — | do | | [illegible] | [illegible] |
| June — | do | | [illegible] | [illegible] |
| Aug. — | do | | [illegible] | [illegible] |
| Mar. — | do | | [illegible] | [illegible] |
| June — | do | | [illegible] | [illegible] |
| Sept. — | do | | [illegible] | [illegible] |
| Oct. [illegible] | do | | [illegible] | [illegible] |
| Sept. [illegible] | do | | [illegible] | [illegible] |
| June [illegible] | do | | [illegible] | [illegible] |
| Aug. [illegible] | do | | [illegible] | [illegible] |
| June [illegible] | do | | [illegible] | [illegible] |
| Sept. [illegible] | do | | [illegible] | [illegible] |
| June [illegible] | do | | [illegible] | [illegible] |
| Oct. [illegible] | do | | [illegible] | [illegible] |
| June [illegible] | do | | [illegible] | [illegible] |
| Sept. [illegible] | do | | [illegible] | [illegible] |
| Mar. [illegible] | Excelsior Land & Water Co. | [illegible] | | [illegible] |
| Sept. [illegible] | do | [illegible] | | [illegible] |
| July [illegible] | do | [illegible] | | [illegible] |
| Aug. [illegible] | do | [illegible] | | [illegible] |
| June [illegible] | do | [illegible] | | [illegible] |
| Sept. [illegible] | do | [illegible] | | [illegible] |
| July — | Gage canal intake, Santa Ana River | | [illegible] | [illegible] |
| Sept. — | do | | [illegible] | [illegible] |
| Mar. — | do | | [illegible] | [illegible] |
| June — | do | | [illegible] | [illegible] |
| Aug. — | do | | [illegible] | [illegible] |
| Mar. — | do | | [illegible] | [illegible] |
| June — | do | | [illegible] | [illegible] |
| Sept. — | do | | [illegible] | [illegible] |
| Oct. 7 | do | | [illegible] | [illegible] |
| Aug. [illegible] | do | | [illegible] | [illegible] |
| Mar. [illegible] | do | | [illegible] | [illegible] |
| Aug. [illegible] | do | | [illegible] | [illegible] |
| Mar. [illegible] | do | | [illegible] | [illegible] |
| Sept. 4 | do | | [illegible] | [illegible] |
| June [illegible] | do | | [illegible] | [illegible] |
| Sept. 7 | do | | [illegible] | [illegible] |
| June [illegible] | do | | [illegible] | [illegible] |
| Sept. [illegible] | do | | [illegible] | [illegible] |
| June — | Gage canal, Palm Avenue weir | [illegible] | | [illegible] |
| Sept. — | do | [illegible] | | [illegible] |
| Mar. — | do | [illegible] | | [illegible] |
| June — | do | [illegible] | | [illegible] |
| Aug. — | do | [illegible] | | [illegible] |
| Mar. — | do | [illegible] | | [illegible] |
| June — | do | [illegible] | | [illegible] |
| Sept. — | do | [illegible] | | [illegible] |
| Oct. [illegible] | do | [illegible] | | [illegible] |
| Aug. [illegible] | do | [illegible] | | [illegible] |
| Mar. [illegible] | do | [illegible] | | [illegible] |
| Aug. [illegible] | do | [illegible] | | [illegible] |
| Mar. [illegible] | do | [illegible] | | [illegible] |
| Sept. [illegible] | do | [illegible] | | [illegible] |
| June [illegible] | do | [illegible] | | [illegible] |
| Sept. 7 | do | [illegible] | [illegible] | [illegible] |
| June [illegible] | do | [illegible] | | [illegible] |
| Sept. [illegible] | do | | [illegible] | [illegible] |
| Sept. 9 | Garner tract, artesian well | [illegible] | [illegible] | [illegible] |

*Natural flow, in second-feet, of storm water compared with developed water in San Bernardino Valley above Colton, Cal.*—Continued.

| Date. | Location. | Developed. | Natural. | Total. |
|---|---|---|---|---|
| | | Sec.-ft. | Sec.-ft. | Sec.-ft. |
| May [illegible], 1904 | [illegible] Terrace pumping plant | 1.[illegible] | | [illegible] |
| Aug. 7, 1904 | do | .24 | | [illegible] |
| May 1, [illegible]05 | do | .54 | | [illegible] |
| Aug. [illegible], [illegible]05 | do | .[illegible] | | [illegible] |
| June [illegible], [illegible]06 | do | .[illegible] | | [illegible] |
| Sept. [illegible], [illegible]06 | do | .35 | | [illegible] |
| June [illegible], 1907 | do | .70 | | [illegible] |
| Sept. [illegible], 1907 | do | .[illegible] | | [illegible] |
| June —, 1898 | Laws & [illegible] ditch | | [illegible] | [illegible] |
| Sept. —, 1898 | do | | .[illegible] | [illegible] |
| Mar. —, 1899 | do | | .[illegible] | [illegible] |
| June —, 1899 | do | | .[illegible] | [illegible] |
| Aug. —, 1899 | do | | .[illegible] | [illegible] |
| Mar. —, 1900 | do | | .[illegible] | [illegible] |
| June —, 1900 | do | | .[illegible] | [illegible] |
| Sept. —, 1900 | do | | .[illegible] | [illegible] |
| Sept. [illegible], 1902 | do | | .[illegible] | [illegible] |
| Aug. 7, 1903 | do | | .[illegible] | [illegible] |
| May [illegible], 1904 | do | | .[illegible] | [illegible] |
| Aug. [illegible], 1904 | do | | .[illegible] | [illegible] |
| June [illegible], 1905 | do | | .[illegible] | [illegible] |
| Sept. [illegible], 1905 | do | | .[illegible] | [illegible] |
| June [illegible], 1906 | do | | .[illegible] | [illegible] |
| Aug. [illegible], 1906 | do | | .[illegible] | [illegible] |
| June [illegible], 1907 | do | | .[illegible] | [illegible] |
| Sept. [illegible], 1907 | do | .[illegible] | | [illegible] |
| Sept. [illegible], 1903 | [illegible] pumping plant | 1.79 | | [illegible] |
| June [illegible], 1904 | do | 1.[illegible] | | [illegible] |
| Aug. 7, 1904 | do | 1.54 | | [illegible] |
| June [illegible], 1905 | do | 1.[illegible] | | [illegible] |
| Sept. [illegible], 1905 | do | 1.50 | | [illegible] |
| June [illegible], 1906 | do | 1.[illegible] | | [illegible] |
| Aug. [illegible], 1906 | do | 1.50 | | [illegible] |
| June [illegible], 1907 | do | 1.50 | | [illegible] |
| Sept. [illegible], 1907 | do | 1.50 | | [illegible] |
| Sept. [illegible], 1903 | Ford tract, artesian well | .21 | | [illegible] |
| Sept. [illegible], 1903 | Johnson & Hubbard pumping plant | .42 | | [illegible] |
| June [illegible], 1904 | do | .[illegible] | | [illegible] |
| Aug. 7, 1904 | do | .[illegible] | | [illegible] |
| June [illegible], 1905 | do | .[illegible] | | [illegible] |
| Sept. [illegible], 1905 | do | .30 | | [illegible] |
| June [illegible], 1906 | do | .52 | | [illegible] |
| Aug. [illegible], 1906 | do | .48 | | [illegible] |
| June [illegible], 1907 | do | .40 | | [illegible] |
| Sept. [illegible], 1907 | do | .[illegible] | | [illegible] |
| Sept. [illegible], 1903 | Lamb pumping plant | .24 | | [illegible] |
| May 2, 1904 | do | .35 | | [illegible] |
| Aug. 5, 1904 | do | .35 | | [illegible] |
| June [illegible], 1905 | do | .30 | | [illegible] |
| Sept. [illegible], 1905 | do | .[illegible] | | [illegible] |
| June [illegible], 1906 | do | .[illegible] | | [illegible] |
| Aug. [illegible], 1906 | do | .[illegible] | | [illegible] |
| June [illegible], 1907 | do | .[illegible] | | [illegible] |
| Sept. [illegible], 1907 | do | .[illegible] | | [illegible] |
| Sept. [illegible], 1903 | Lawton Well Co. pumping plant | .[illegible] | | [illegible] |
| June [illegible], 1904 | do | .[illegible] | | [illegible] |
| Aug. 5, 1904 | do | .[illegible] | | [illegible] |
| June [illegible], 1905 | do | .42 | | [illegible] |
| Sept. [illegible], 1905 | do | .[illegible] | | [illegible] |
| June [illegible], 1906 | do | .[illegible] | | [illegible] |
| Aug. [illegible], 1906 | do | .70 | | [illegible] |
| June [illegible], 1907 | do | .[illegible] | | [illegible] |
| Sept. [illegible], 1907 | do | .[illegible] | | [illegible] |
| June [illegible], 1898 | [illegible] & Farrell ditch | | [illegible] | [illegible] |
| Sept. [illegible], 1898 | do | | .[illegible] | [illegible] |
| Mar. [illegible], 1899 | do | | 1.[illegible] | [illegible] |
| June [illegible], 1899 | do | | 1.[illegible] | [illegible] |
| Aug. [illegible], 1899 | do | | .54 | [illegible] |
| Mar. [illegible], 1900 | do | | 1.[illegible] | [illegible] |
| June [illegible], 1900 | do | | .[illegible] | [illegible] |
| Sept. [illegible], 1900 | do | | .[illegible] | [illegible] |
| Oct. [illegible], [illegible] | do | | .[illegible] | [illegible] |
| Aug. [illegible], [illegible] | do | | .[illegible] | [illegible] |
| June [illegible], 1904 | do | | .[illegible] | [illegible] |
| Aug. [illegible], 1904 | do | | .[illegible] | [illegible] |
| June [illegible], 1905 | do | | .[illegible] | [illegible] |
| Sept. [illegible], 1905 | do | | .[illegible] | [illegible] |
| June [illegible], 1906 | do | | .[illegible] | [illegible] |
| [illegible] 24, 1906 | do | | [illegible] | [illegible] |

Natural flow [illegible]

| Date | Location | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| | | Sec.-ft. | Sec.-ft. | Sec.-ft. |
| June 20, 1907 | Langdon & Farrel ditch | | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] |
| [illegible] 17, 1908 | Little Creek Water & Improvement [illegible] | [illegible] | | 4.[illegible] |
| [illegible] | McIntyre [illegible] | | [illegible] | [illegible] |
| [illegible] | McKenzie ditch | | [illegible] | [illegible] |
| [illegible] | Meeks & Daley ditch | | [illegible] | [illegible] |
| [illegible] | Merryfield pumping plant | [illegible] | | [illegible] |
| [illegible] | Mount Vernon Water [illegible] | | | |
| [illegible] | Orange Land & Water Co. pumping plant | [illegible] | | |
| June 23, 1909 | [illegible] | [illegible] | | |

[illegible] —Continued.

| [illegible] | [illegible] | De- [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| | | Sec.-ft. | Sec.-ft. | Sec.-ft. |
| [illegible] | [illegible] Land & Water Co. pumping plant | [illegible] | ------ | [illegible] |
| [illegible] | do | [illegible] | ------ | |
| [illegible] | do | [illegible] | ------ | |
| [illegible] | [illegible] ditch | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | |
| [illegible] | do | ------ | [illegible] | |
| [illegible] | do | ------ | [illegible] | |
| [illegible] | do | ------ | [illegible] | |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | [illegible] ditch | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | [illegible] |
| [illegible] | do | ------ | [illegible] | |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] pumping plant | [illegible] | ------ | [illegible] |
| [illegible] | do | [illegible] | ------ | [illegible] |
| [illegible] | do | [illegible] | ------ | [illegible] |
| [illegible] | do | [illegible] | ------ | [illegible] |
| [illegible] | do | [illegible] | ------ | [illegible] |
| [illegible] | do | 2.00 | ------ | [illegible] |
| [illegible] | do | [illegible] | ------ | [illegible] |
| [illegible] | do | 2.00 | ------ | [illegible] |
| [illegible] | do | 2.00 | ------ | [illegible] |
| June —, [illegible] | Riverside Highland Water Co. pumping plant, Lytle Creek | 4.40 | ------ | [illegible] |
| Sept. —, [illegible] | do | 4.43 | ------ | [illegible] |
| Mar. —, [illegible] | do | 4.25 | ------ | [illegible] |
| June —, [illegible] | do | [illegible] | ------ | [illegible] |
| Aug. —, [illegible] | do | [illegible] | ------ | [illegible] |
| Mar. —, [illegible] | do | [illegible] | ------ | [illegible] |
| June —, [illegible] | do | [illegible] | ------ | [illegible] |
| Sept. —, [illegible] | do | [illegible] | ------ | [illegible] |
| Sept. [illegible] | do | [illegible] | ------ | [illegible] |
| May [illegible] | do | [illegible] | ------ | [illegible] |
| Aug. [illegible] | do | 2.00 | ------ | [illegible] |
| June [illegible] | do | [illegible] | ------ | [illegible] |
| Sept. [illegible] | do | [illegible] | ------ | [illegible] |
| June [illegible] | do | [illegible] | ------ | [illegible] |
| Sept. [illegible] | do | [illegible] | ------ | [illegible] |
| June [illegible] | do | [illegible] | ------ | [illegible] |
| Sept. [illegible] | do | [illegible] | ------ | [illegible] |
| May 2, [illegible] | Riverside Highland Water Co., Santa Ana River | .00 | ------ | [illegible] |
| Aug. [illegible] | do | [illegible] | 0.42 | [illegible] |
| May [illegible] | do | 6.35 | ------ | [illegible] |
| Sept. [illegible] | do | 7.90 | .40 | [illegible] |
| June 30, [illegible] | do | 1.30 | 2.30 | [illegible] |
| Sept. [illegible] | do | 6.30 | ------ | [illegible] |
| June 30, [illegible] | do | 2.30 | 1.00 | [illegible] |
| Sept. [illegible] | do | 3.40 | ------ | [illegible] |
| June —, 1898 | Riverside Water Co. upper canal | 18.00 | 41.34 | [illegible] |
| Sept. —, 1898 | do | 17.54 | [illegible] | [illegible] |
| Mar. —, 1899 | do | 18.04 | [illegible] | [illegible] |
| June —, 1899 | do | 17.50 | [illegible] | [illegible] |
| Aug. —, 1899 | do | 27.50 | [illegible] | [illegible] |
| Mar. —, 1900 | do | 24.54 | 37.40 | [illegible] |
| June —, 1900 | do | 32.36 | [illegible] | [illegible] |
| Sept. —, 1900 | do | 27.00 | 34.02 | [illegible] |
| Sept. 30, 1902 | do | [illegible] | [illegible] | [illegible] |
| Sept. 1, 1903 | do | [illegible] | 32.01 | [illegible] |
| May 31, 1904 | do | [illegible] | 12.96 | [illegible] |
| July 20, 1904 | do | 19.86 | [illegible] | [illegible] |
| May 11, 1905 | do | 25.32 | [illegible] | [illegible] |
| [illegible] | do | 21.20 | 12.90 | 34.10 |
| [illegible] | do | 2.90 | [illegible] | [illegible] |

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Return waters, in second-feet, in San Bernardino Valley below Slover Mountain and above Riverside Narrows, Cal.*—Continued.

| Date. | Location. | Developed. | Natural. | Total. |
|---|---|---|---|---|
| | | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Sept. 29, 1902 | Evans or Smith ditch, 1 mile below Riverside County line | | 0.53 | 0.53 |
| Aug. 22, 1903 | do | | .70 | .70 |
| May 16, 1904 | do | | 2.08 | 2.08 |
| Aug. 11, 1904 | do | | 1.31 | 1.31 |
| May 29, 1905 | do | | 2.30 | 2.30 |
| Aug. 14, 1905 | do | | .00 | .00 |
| June 25, 1906 | do | | 1.70 | 1.70 |
| Sept. 3, 1906 | do | | .00 | .00 |
| June 19, 1907 | do | | 5.70 | 5.70 |
| Sept. 20, 1907 | do | | .00 | .00 |
| June 2, 1904 | Evans well ditch, Santa Ana Street | 0.51 | | .51 |
| Aug. 8, 1904 | do | .04 | | .04 |
| May 29, 1905 | do | .00 | | .00 |
| Aug. 9, 1905 | do | 1.70 | | 1.70 |
| June 23, 1906 | do | | .00 | .00 |
| Sept. 3, 1906 | do | | .00 | .00 |
| June 19, 1907 | do | | .00 | .00 |
| Sept. 23, 1907 | do | .80 | | .80 |
| June 3, 1904 | Evans pipe line to China Gardens at headworks | | 1.41 | 1.41 |
| Aug. 8, 1904 | do | | .00 | .00 |
| May 30, 1905 | do | | .00 | .00 |
| Aug. 11, 1905 | do | | .00 | .00 |
| June 29, 1906 | do | | .00 | .00 |
| Sept. 13, 1906 | do | | .00 | .00 |
| June 24, 1907 | do | | 1.40 | 1.40 |
| Sept. 19, 1907 | do | | .00 | .00 |
| Aug. 8, 1904 | Evans pumping plant, 1,000 feet south of west end of West Riverside Bridge | 3.03 | | 3.03 |
| May 27, 1905 | do | 2.87 | | 2.87 |
| Sept. 5, 1905 | do | 4.20 | | 4.20 |
| June 27, 1906 | do | 3.60 | | 3.60 |
| Aug. 28, 1906 | do | 5.53 | | 5.53 |
| June 24, 1907 | do | .00 | | .00 |
| Sept. 19, 1907 | do | | .00 | .00 |
| Aug. 18, 1904 | Evans Jurupa pumping plant | 2.00 | | 2.00 |
| June 19, 1905 | do | 2.00 | | 2.00 |
| Oct. 4, 1905 | do | .00 | | .00 |
| June 29, 1906 | do | .00 | | .00 |
| June 24, 1907 | do | .00 | | .00 |
| Sept. 19, 1907 | do | | .00 | .00 |
| June 3, 1904 | Ferris Gallagher ditch near headworks | | 1.72 | 1.72 |
| Aug. 8, 1904 | do | | 1.71 | 1.71 |
| May 30, 1905 | do | | 2.20 | 2.20 |
| Aug. 14, 1905 | do | | 2.00 | 2.00 |
| June 30, 1906 | do | | 2.90 | 2.90 |
| Sept. 13, 1906 | do | | 3.25 | 3.25 |
| June 24, 1907 | do | | .00 | .00 |
| Sept. 19, 1907 | do | | 1.10 | 1.10 |
| June 3, 1904 | Gallagher ditch | | .86 | .86 |
| Aug. 18, 1904 | do | | .92 | .92 |
| May 30, 1905 | do | | .00 | .00 |
| Aug. 14, 1905 | do | | 1.20 | 1.20 |
| June 30, 1906 | do | | .76 | .76 |
| Sept. 13, 1906 | do | | .00 | .00 |
| June 24, 1907 | do | | 1.60 | 1.60 |
| Sept. 19, 1907 | do | | .00 | .00 |
| June 3, 1904 | Jurupa pumping plant, to supply Rubidoux ditch | .00 | | .00 |
| Aug. 11, 1904 | do | 4.35 | | 4.35 |
| May 29, 1905 | do | 2.10 | | 2.10 |
| Aug. 15, 1905 | do | 4.80 | | 4.80 |
| June 26, 1906 | do | 2.30 | | 2.30 |
| Sept. 3, 1906 | do | 5.20 | | 5.20 |
| June 22, 1907 | do | .00 | | .00 |
| Sept. 23, 1907 | do | 4.80 | | 4.80 |
| June —, 1898 | Lower canal, Riverside Water Co | | 10.3 | 10.30 |
| Sept. —, 1898 | do | | 7.70 | 7.70 |
| Mar. —, 1899 | do | | 16.20 | 16.20 |
| June —, 1899 | do | | 9.09 | 9.09 |
| Aug. —, 1899 | do | | 7.38 | 7.38 |
| Mar. —, 1900 | do | | 8.00 | 8.00 |
| June —, 1900 | do | | 7.16 | 7.16 |
| July 27, 1900 | do | | 7.13 | 7.13 |
| Sept. —, 1900 | do | | 6.69 | 6.69 |
| Sept. 29, 1902 | do | | 3.07 | 3.07 |
| Aug. 21, 1903 | do | | 2.05 | 2.05 |
| May 21, 1904 | do | | 3.15 | 3.15 |
| Aug. 11, 1904 | do | | .39 | .39 |
| May 30, 1905 | do | | 2.20 | 2.20 |
| Sept. 5, 1905 | do | | .00 | .00 |

*Return waters, in second-feet, in San Bernardino Valley below Slover Mountain and above Riverside Narrows, Cal.*—Continued.

| Date. | Location. | Developed. | Natural. | Total. |
|---|---|---|---|---|
| | | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| June 27, 1906 | Lower canal, Riverside Water Co | | 3.10 | 3.10 |
| Sept. 3, 1906 | ....do | | .00 | .00 |
| June 19, 1907 | ....do | | 11.70 | 11.70 |
| Sept. 23, 1907 | ....do | | .00 | .00 |
| June 6, 1905 | Pond's pumping plant | 2.50 | | 2.50 |
| Oct. 4, 1905 | ....do | 2.25 | | 2.25 |
| June 29, 1906 | ....do | 1.30 | | 1.30 |
| Sept. 7, 1906 | ....do | 2.50 | | 2.50 |
| June 24, 1907 | ....do | 2.50 | | 2.50 |
| Sept. 23, 1907 | ....do | 1.50 | | 1.50 |
| May 16, 1904 | Riverside Power Co. canal at Pedley crossing | | 38.30 | 38.30 |
| Aug. 18, 1904 | ....do | | 29.50 | 29.50 |
| June 15, 1905 | ....do | | 30.60 | 30.60 |
| Sept. 22, 1905 | ....do | | 27.00 | 27.00 |
| June 21, 1906 | ....do | | 27.70 | 27.70 |
| Sept. 29, 1906 | ....do | | 35.00 | 35.00 |
| June 26, 1907 | ....do | | 49.50 | 49.50 |
| Sept. 19, 1907 | ....do | | 36.00 | 36.00 |
| June 19, 1905 | Rivero Land Co. pumping plant | .80 | | .80 |
| Oct. 4, 1905 | ....do | .60 | | .60 |
| June 29, 1906 | Rivino Land Co. pumping plant No. 1 | .80 | | .80 |
| Sept. 7, 1906 | ....do | .70 | | .70 |
| June 24, 1907 | ....do | 1.35 | | 1.35 |
| Sept. 23, 1907 | ....do | 1.00 | | 1.00 |
| Sept. 13, 1906 | Rivino Land Co. pumping plant No. 2 | .83 | | .83 |
| June 26, 1907 | ....do | 2.30 | | 2.30 |
| Sept. 23, 1907 | ....do | .00 | | .00 |
| Sept. 29, 1902 | Roubidoux ditch at measuring box | | 7.19 | 7.19 |
| Aug. 21, 1903 | ....do | 1.74 | 4.78 | 6.52 |
| May 16, 1904 | ....do | | 6.49 | 6.49 |
| Aug. 8, 1904 | ....do | | 2.82 | 2.82 |
| May 29, 1905 | ....do | | 4.92 | 4.92 |
| Aug. 15, 1905 | ....do | | 7.20 | 7.20 |
| June 26, 1906 | ....do | | 4.40 | 4.40 |
| Sept. 3, 1906 | ....do | | 2.00 | 2.00 |
| June 19, 1907 | ....do | | 9.80 | 9.80 |
| Sept. 23, 1907 | ....do | 4.80 | 1.60 | 6.40 |
| Oct. 10, 1902 | Santa Ana River at Riverside Narrows | | 43.25 | 43.25 |
| Aug. 25, 1903 | ....do | | 40.70 | 40.70 |
| Aug. 8, 1904 | Spanishtown, pumping plant at weir at end of main | 3.22 | | 3.22 |
| May 29, 1905 | ....do | 4.17 | | 4.17 |
| Aug. 11, 1905 | ....do | 2.60 | | 2.60 |
| June 26, 1906 | ....do | 4.60 | | 4.60 |
| Sept. 3, 1906 | ....do | .00 | | .00 |
| June 22, 1907 | ....do | .00 | | .00 |
| Sept. 24, 1907 | ....do | .00 | | .00 |
| Aug. 8, 1904 | Springbrook, pumping plant at weir at end of main | | 4.84 | 4.84 |
| May 27, 1905 | ....do | | 5.58 | 5.58 |
| Aug. 11, 1905 | ....do | | 3.60 | 3.60 |
| June 23, 1906 | ....do | .00 | | .00 |
| Sept. 3, 1906 | ....do | .00 | | .00 |
| June 22, 1907 | ....do | .00 | | .00 |
| Sept. 24, 1907 | ....do | | .00 | .00 |
| Aug. 8, 1904 | Soquel ditch | | 1.49 | 1.49 |
| May 27, 1905 | ....do | | 3.20 | 3.20 |
| Aug. 11, 1905 | ....do | | 2.70 | 2.70 |
| June 27, 1906 | ....do | | 6.60 | 6.60 |
| Aug. 28, 1906 | ....do | | 5.30 | 5.30 |
| June 24, 1907 | ....do | | 1.90 | 1.90 |
| Sept. 19, 1907 | ....do | | 3.70 | 3.70 |
| June 3, 1904 | Zimmerman pipe line | | .00 | .00 |
| Aug. 8, 1904 | ....do | | 1.08 | 1.08 |
| May 30, 1905 | ....do | | 1.40 | 1.40 |
| Aug. 14, 1905 | ....do | | 1.20 | 1.20 |
| June 30, 1906 | ....do | | 2.20 | 2.20 |
| Sept. 13, 1906 | ....do | | .00 | .00 |
| June 24, 1907 | ....do | | .00 | .00 |
| Sept. 19, 1907 | ....do | | .00 | .00 |

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the Santa Ana River basin.

*Miscellaneous measurements of streams in Santa Ana River drainage basin.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | Sec.-feet. |
| [illegible] | [illegible] Creek | [illegible] | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] Canyon Creek | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] | [illegible] |
| [illegible] | do | | do | [illegible] |
| [illegible] | do | | [illegible] | [illegible] |
| [illegible] | [illegible] Canyon Creek | [illegible] | [illegible] | [illegible] |
| [illegible] | do | | do | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] River | [illegible] | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| do | [illegible] River, [illegible] Fork | do | [illegible] | [illegible] |
| do | [illegible] River, North Fork | do | do | [illegible] |
| [illegible] | [illegible] River, South Fork | do | [illegible] | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | [illegible] | [illegible] |

*Discharge measurements of water between the Riverside Narrows and the Anaheim [illegible] in Santa Ana River*

[illegible]

| Date. | Place. | Discharge. |
|---|---|---|
| | | Sec.-feet. |
| Sept. [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] |
| Aug. [illegible] | do | [illegible] |
| June [illegible] | do | [illegible] |
| Sept. [illegible] | do | [illegible] |
| June [illegible] | do | [illegible] |
| Sept. [illegible] | do | [illegible] |
| June [illegible] | do | [illegible] |
| Sept. [illegible] | do | [illegible] |
| May [illegible] | [illegible] | [illegible] |
| Aug. [illegible] | do | [illegible] |
| June [illegible] | do | 4.1 |
| Sept. [illegible] | do | [illegible] |
| June [illegible] | do | [illegible] |
| Sept. [illegible] | do | [illegible] |
| June [illegible] | do | [illegible] |
| Sept. [illegible] | do | [illegible] |
| Sept. [illegible] | [illegible] | [illegible] |
| May [illegible] | do | [illegible] |
| Aug. [illegible] | do | [illegible] |
| June [illegible] | do | [illegible] |
| Sept. [illegible] | do | [illegible] |
| June [illegible] | do | [illegible] |
| [illegible] | do | [illegible] |

*Discharge measurements of canals between the Riverside Narrows and the Auburndale bridge having their source in Santa Ana River*—Continued.

| Date. | Canal. | Discharge. |
|---|---|---|
| | | *Sec.-feet.* |
| June 26, 1907 | Fuller ditch | 8.3 |
| Sept. 27, 1907 | .....do | 1.7 |
| May 15, 1904 | Gilliland ditch at Auburndale bridge | .61 |
| Aug. 20, 1904 | .....do | .42 |
| June 15, 1905 | .....do | 1.40 |
| Sept. 22, 1905 | .....do | .30 |
| June 21, 1906 | .....do | .17 |
| Sept. 29, 1906 | .....do | .50 |
| June 26, 1907 | .....do | 1.10 |
| Sept. 27, 1907 | .....do | .60 |
| May 15, 1904 | Newberry ditch at Auburndale bridge | .94 |
| Aug. 20, 1904 | .....do | 2.70 |
| June 15, 1905 | .....do | .00 |
| Sept. 22, 1905 | .....do | .00 |
| June 21, 1906 | .....do | .00 |
| Sept. 29, 1906 | .....do | 1.60 |
| June 26, 1907 | .....do | .00 |
| Sept. 27, 1907 | .....do | .80 |
| Sept. 5, 1903 | Newton ditch, near intake | 4.10 |
| May 15, 1904 | .....do | 4.70 |
| Aug. 20, 1904 | .....do | 7.70 |
| June 15, 1905 | .....do | 2.30 |
| Sept. 22, 1905 | .....do | 1.70 |
| June 21, 1906 | .....do | .00 |
| Sept. 29, 1906 | .....do | .00 |
| June 26, 1907 | .....do | .00 |
| Sept. 27, 1907 | .....do | .00 |
| Sept. 5, 1903 | Roberts ditch near intake | 2.60 |
| May 15, 1904 | .....do | 2.20 |
| Aug. 20, 1904 | .....do | 1.40 |
| June 15, 1905 | .....do | 1.00 |
| Sept. 22, 1905 | .....do | 1.70 |
| June 21, 1906 | .....do | 2.60 |
| Sept. 29, 1906 | .....do | 1.50 |
| June 26, 1907 | .....do | .80 |
| Sept. 27, 1907 | .....do | .00 |
| June 15, 1905 | Santa Ana River at Auburndale Bridge | 63.60 |
| Sept. 22, 1905 | .....do | 57.00 |
| June 21, 1906 | .....do | 56.00 |
| Sept. 29, 1906 | .....do | 52.00 |
| June 26, 1906 | .....do | 78.00 |
| Sept. 27, 1906 | .....do | 57.70 |
| June 15, 1905 | Santa Ana River at Auburndale Bridge, including canals | 71.13 |
| Sept. 22, 1905 | .....do | 57.80 |
| June 21, 1906 | .....do | 59.37 |
| Sept. 29, 1906 | .....do | 57.60 |
| June 26, 1907 | .....do | 86.00 |
| Sept. 27, 1907 | .....do | 66.50 |
| Sept. 5, 1903 | Wilbur ditch at Roger's pipe trestle crossing | 1.70 |
| May 15, 1904 | .....do | 2.54 |
| Aug. 20, 1904 | .....do | 2.13 |
| June 15, 1905 | .....do | 6.10 |
| Sept. 22, 1905 | .....do | 6.40 |
| June 21, 1906 | .....do | .00 |
| Sept. 29, 1906 | .....do | .00 |
| June 26, 1907 | .....do | .00 |
| Sept. 27, 1907 | .....do | .00 |

*Miscellaneous measurements of canals in Santa Ana River drainage basin*—Co[illegible]

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-feet* |
| Oct. 25, 1900 | Alvitres ditch | K. Sanborn | Vicinity of Colton and Riverside. | [illegible] |
| Apr. 29, 1903 | Anaheim and Fullerton canal | O. W. Peterson | Heading | [illegible] |
| Sept. 25, 1903 | ....do | W. B. Clapp | Esperanza | [illegible] |
| June 22, 1898 | Anaheim and Santa Ana canals. | F. H. Olmsted | Division box | [illegible] |
| Aug. 30, 1898 | ....do | ....do | ....do | [illegible] |
| Aug. 30, 1899 | ....do | S. G. Bennett | ....do | [illegible] |
| Sept. 15, 1899 | ....do | J. B. Lippincott | ....do | [illegible] |
| Oct. 25, 1899 | ....do | ....do | ....do | [illegible] |
| July 28, 1900 | ....do | S. G. Bennett | ....do | [illegible] |
| Oct. 5, 1900 | ....do | W. W. Cockins, jr. | ....do | [illegible] |
| Aug. 27, 1901 | ....do | J. B. Lippincott | ....do | [illegible] |
| Aug. 31, 1901 | ....do | ....do | ....do | [illegible] |
| Sept. 7, 1898 | Bear Valley ditch | ....do | Joint headworks with Palm Spring. | [illegible] |
| Aug. 25, 1899 | ....do | S. G. Bennett | ....do | [illegible] |
| Feb. 17, 1898 | ....do | J. B. Lippincott | ½ mile northeast of ranch house | [illegible] |
| Sept. 28, 1899 | ....do | ....do | Headgate | [illegible] |
| Sept. 29, 1899 | ....do | ....do | 1 mile below headgate | [illegible] |
| Aug. 30, 1901 | Castillo ditch | ....do | Below Riverside Narrows | [illegible] |
| Sept. 3, 1899 | Durkee ditch | ....do | Near ranch house | [illegible] |
| Sept. 13, 1899 | ....do | ....do | Newberry east line | [illegible] |
| July 28, 1900 | ....do | S. G. Bennett | Ranch house | [illegible] |
| Aug. 27, 1901 | ....do | J. B. Lippincott | | [illegible] |
| Aug. 31, 1901 | ....do | ....do | | [illegible] |
| Sept. 23, 1903 | ....do | W. B. Clapp | Auburndale Bridge | [illegible] |
| July 1, 1899 | Evans ditch | | Near Temescal, Riverside County. | [illegible] |
| Aug. —, 1899 | ....do | | ....do | [illegible] |
| June 19, 1898 | Evans lower ditch | F. H. Olmsted | Riverside County | [illegible] |
| Aug. 28, 1898 | ....do | ....do | ....do | [illegible] |
| Aug. 30, 1899 | ....do | S. G. Bennett | ....do | [illegible] |
| July 27, 1900 | ....do | ....do | ....do | [illegible] |
| Oct. 25, 1900 | ....do | K. Sanborn | ....do | [illegible] |
| July 27, 1900 | Evans upper ditch | S. G. Bennett | ....do | [illegible] |
| Oct. 25, 1900 | ....do | K. Sanborn | ....do | [illegible] |
| Aug. 30, 1901 | ....do | J. B. Lippincott | ....do | [illegible] |
| Oct. 5, 1900 | Fuller ditch | W. W. Cockins, jr. | | [illegible] |
| Aug. 30, 1901 | ....do | J. B. Lippincott | Near intake | [illegible] |
| Do | ....do | ....do | Fuller's ranch house | [illegible] |
| July 28, 1900 | Gilliland's ditch | S. G. Bennett | Auburndale Bridge | [illegible] |
| Sept. 23, 1903 | ....do | W. B. Clapp | ....do | [illegible] |
| June 20, 1898 | "H" ditch | F. H. Olmsted | On right bank of Santa Ana River 3 miles below Riverside Narrows. | [illegible] |
| Do | "J" ditch | ....do | On right bank of Santa Ana River 5 miles below Riverside Narrows. | [illegible] |
| June 18, 1898 | Jurupa canal | ....do | | [illegible] |
| July 1, 1898 | ....do | Lippincott and Sanborn. | | 7.11 |
| Aug. 27, 1898 | ....do | F. H. Olmsted | | [illegible] |
| Sept. 22, 1898 | ....do | J. B. Lippincott | | [illegible] |
| May 31, 1898 | ....do | S. G. Bennett | | [illegible] |
| July 15, 1898 | ....do | ....do | | [illegible] |
| July 26, 1899 | ....do | ....do | Submerged flume above Colton Bridge. | [illegible] |
| Aug. 24, 1899 | ....do | ....do | ....do | [illegible] |
| July 27, 1900 | ....do | ....do | | [illegible] |
| Oct. 19, 1900 | ....do | K. Sanborn | | [illegible] |
| July 28, 1900 | Newberry ditch | S. G. Bennett | Auburndale Bridge | [illegible] |
| Aug. 27, 1901 | ....do | J. B. Lippincott | Head | [illegible] |
| Aug. 31, 1901 | ....do | ....do | ....do | [illegible] |
| Sept. 23, 1903 | ....do | W. B. Clapp | Auburndale Bridge | [illegible] |
| Aug. 30, 1901 | ....do | J. B. Lippincott | Below Narrows | [illegible] |
| June 17, 1898 | Riverside Water Co.'s lower canal. | F. H. Olmsted | | [illegible] |
| June 18, 1898 | ....do | ....do | | 11.3 |
| Aug. 30, 1901 | ....do | J. B. Lippincott | | 4.52 |
| Sept. 30, 1902 | ....do | K. Sanborn | | [illegible] |
| Aug. 30, 1899 | Riverside Water Co.'s upper canal. | S. G. Bennett | | 57.4 |
| July 28, 1900 | ....do | ....do | | 43.3 |
| Aug. 27, 1901 | Roberts ditch | J. B. Lippincott | | .0 |
| Aug. 31, 1901 | ....do | ....do | | .0 |

*Miscellaneous measurements of canals in Santa Ana River drainage basin, Cal.*—Contd.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-feet.* |
| June 19, 1898 | Roubidoux ditch | F. H. Olmsted | | 8.94 |
| Aug. 2[illegible], 1898 | do | do | | 8.50 |
| July 27, 1900 | do | S. G. Bennett | | 8.18 |
| Oct. 25, 1900 | do | K. Sanborn | | 7.80 |
| Aug. 30, 1901 | do | J. B. Lippincott | | 8.75 |
| July 14, 1900 | San Timoteo ditch | K. Sanborn | Bicknell Station | 1.50 |
| June 22, 1898 | Santa Ana Irrigation Co.'s canal. | F. H. Olmsted | Near bridge at Yorba | 29.0 |
| Aug. 30, 1898 | do | do | do | 24.6 |
| May 26, 1899 | do | F. Rolfe | 3 miles above Olive | 44.0 |
| Sept. 15, 1899 | do | J. B. Lippincott | | 30.3 |
| Oct. 26, 1899 | do | do | | 47.2 |
| Sept. 3, 1900 | do | W. P. Searcy | | 39.0 |
| Aug. 15, 1900 | do | do | | 25.7 |
| Aug. 31, 1901 | do | J. B. Lippincott | Road crossing | 18.3 |
| Apr. 30, 1903 | do | O. W. Peterson | 1 mile below heading | 43 |
| Sept. 23, 1903 | do | W. B. Clapp | do | 34 |
| June 24, 1901 | Seecher ditch | W. P. Searcy | Rincon Bridge | .62 |
| June 20, 1898 | Townsend ditch | F. H. Olmsted | | 4.80 |
| Oct. 5, 1900 | do | W. W. Cockins, jr. | | 5.84 |
| July 27, 1900 | Trujillo ditch | S. G. Bennett | | .46 |
| Oct. 25, 1900 | do | K. Sanborn | | .53 |
| Aug. 30, 1901 | Wilbur ditch | J. B. Lippincott | | 4.52 |
| Oct. 26, 1899 | Yorba ditch | do | | 8.88 |
| Aug. 15, 1900 | do | W. P. Searcy | | 14.0 |
| Sept. 3, 1900 | do | do | | 21.4 |
| Aug. 31, 1901 | do | J. B. Lippincott | | .40 |
| Sept. 25, 1903 | do | W. B. Clapp | Esperanza | .6 |

*Miscellaneous low-water measurements made in basin of Santa Ana River, Los Angeles, San Bernardino, Riverside, and Orange counties.*

| Date. | Locality. | Discharge. |
|---|---|---|
| 1900. | | *Sec.-feet.* |
| Sept. 25 | Frey's ranch, near Spadra | 1.85 |
| 25 | Phillips's ranch, near Spadra (weir) | .74 |
| 27 | C. L. Lancaster, Mesa avenue, Lordsburg (weir) | .559 |
| 26 | Covina Irrigation Co. compressor pumping plant, south of Lordsburg | 3.58 |
| 24 | Neuruff place, corner Holt avenue and San Antonio avenue, Pomona (weir) | .33 |
| 26 | Pomona Land & Water Co., Garey avenue (weir) | 1.28 |
| 26 | Consolidated Water Co.'s Pomona air-compressor plant (weir) | 3.34 |
| 24 | Consolidated Water Co., north of Pomona College (weir) | .82 |
| 25 | James Warden's place (weir) | .25 |
| 24 | Brundege place, San Antonio avenue, Pomona | .26 |
| 25 | Del Monte Water Co. (weir) | .96 |
| 25 | San Antonio Water Co.'s wells in Claremont; water goes to Ontario (weir) | .40 |
| 25 | San Antonio Water Co.'s wells at Indian Hill, ½ mile north of Pomona College (weir) | .99 |
| 25 | San Antonio Canyon. From records of Pomona Land & Water Co. The discharge from San Antonio Canyon was 7.53 second-feet Sept. 2, 1895, and 9.02 second-feet on Sept. 6, 1897 (weir) [a] | 3.72 |
| | RED HILL, CUCAMONGA. | |
| July 11 | Cucamonga Land & Water Co., Cucamonga Creek, 30-inch pipe line (weir) | 1.15 |
| 11 | Cucamonga Land & Water Co., Lone Star Spring pumping plant (weir) | 1.20 |
| 11 | Cucamonga Land & Water Co., "Y" tunnel (weir) | 1.68 |
| 11 | Stowell water from 90-acre tract; west side part to Ontario (weir) | 2.97 |
| 11 | San Antonio Water Co., Haskell well (weir) | 2.13 |
| 11 | San Antonio Water Co., Sixteenth street, pumping plant (weir) | 1.72 |
| | | 10.85 |

[a] July 11, 1900, measurement made of water in San Antonio Canyon by S. G. Bennett; discharge, 4.07 second-feet.

Comparison of measurements of discharges and developments at Red Hill, Cal., as indicated in miner's inches.

[Fifty miner's inches equal one second-foot.]

| Date. | Hydrographer. | East side: Creek Div. box, 3-inch line | East side: Div. box, 16-inch line and Y tunnel, built in 1887 | East side: China canyon | East side: Lone Star Spring tunnel | East side: Y tunnel built prior to 1886 | East side: Canyon below No. 1 | East side: Total without Lone Star | East side: Total | West side: Spring northwest of tunnel No. 2 portal | West side: W. canyon "D" | West side: Parrot Spring canyon | West side: Artesian wells No. 1, 2, 3 | West side: Tiburon Spring | West side: Tunnel No. 2 or 80 acre | West side: China garden | West side: Stowell wells and tunnel above [illegible] | West side: Rain precipitation | West side: Total, west side | Grand total, Red Hill |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sept. 26, 1885 | Wm. M. Fitzhugh | 225 50 | | 51 73 | (2 02) | {6 61 / 9 61 / 16 22} | | 203 31 | 205 33 | 50.47 | 45 27 | (9 00) | . | (1 00) | . | | . | 10 81 | 111 74 | [illegible] 07 |
| Nov. 30, 1886 | J. P. Culver | 281.45 | 64.07 | 11.40 | 2.02 | | . | 357.50 | 359.57 | 9.50 | {5 70 / 97 80 / .00 / 104 40} | 18 40 | . | 2 10 | . | (a) | . | 21 [illegible] | 134 [illegible] | 474 [illegible] |
| July 24, 1887 | F. Eaton | 147 50 | 160.50 | (10.00) | (2 00) | 163 00 | . | 327.00 | 320.00 | 13 07 | 31 90 | 10 00 | (a) | (1 00) | . | (16.70) | . | 14 [illegible] | 74 [illegible] | [illegible] |
| July 13, 1888 | J. P. Culver | 155.78 | 183 61 | 18.10 | a13 50 | 138.62 | 40 43 | 357.40 | 371.08 | 3 14 | 86 [illegible] | 5 36 | 16.14 | 1 50 | a17 70 | 16.70 | . | 17 76 | [illegible] | [illegible] |
| July 13, 1889 | E. T. Wright | 154.58 | 163.57 | 13.27 | 9.78 | 136 23 | 48 36 | 361.42 | 371.20 | 3 04 | 40.55 | 17 33 | 15 14 | 1 81 | 64 09 | (16.70) | . | 20 07 | 140 [illegible] | [illegible] |
| July 14, 1890 | do | 260.08 | 228.53 | 17.32 | 10.85 | 150.01 | 72.52 | 505 88 | 510.73 | 3.08 | 71 08 | 20 53 | 13.08 | 0 03 | a73 82 | (16 70) | . | 25 46 | 211 07 | 727 [illegible] |
| Do. | J. P. Culver | 266.82 | 238.04 | 18.50 | 11.28 | 165.55 | 72.49 | 523.30 | 534.01 | 3.14 | 61.78 | 21 47 | 14.20 | 2.38 | 75.49 | (16.70) | . | [illegible] | 205 [illegible] | 760 [illegible] |
| June 29, 1893 | E. T. Wright | ... | ... | ... | . | ... | ... | ... | ... | . | . | 13 20 | . | . | | | . | 10 82 | | |
| July 14, 1893 | do | ... | ... | ... | . | 152.42 | ... | ... | ... | ... | . | . | . | . | 86.46 | | . | | | . |
| Sept. 15, 1894 | do | /160.31 | 182.84 | 18.14 | (8 00) | 141.10 | 41.74 | 350.20 | 364.20 | . | | . | . | . | . | | . | 8 14 | | . |
| June 12, 1895 | do | 196.55 | 154.87 | 21.00 | (7.00) | (110.60) | (44.27) | 374.40 | 381.40 | | | | | | | | . | 20 [illegible] | | |
| June 14, 1896 | N. W. Stowell | ... | ... | ... | . | ... | . | ... | . | 0.00 | 23.00 | 1.00 | 23.00 | . | a16.00 | | 0 00 | | 64 00 | [illegible] |
| Aug. 20, 1896 | F. E. Trask | 132.40 | 137.90 | 11.28 | (7.00) | ... | . | 281.55 | 288.55 | . | ... | . | . | . | . | | | 8 11 | | . |
| Mar. 2, 1897 | N. W. Stowell | ... | ... | ... | . | ... | . | ... | . | . | . | . | . | . | . | | 40 00 | . | | |
| Aug. 6, 1897 | do | ... | ... | . | 0.42 | . | . | | | 0.00 | {30.00 / 7.00 / 27.00} | (0.50) | [illegible] | 0.00 | 41.40 | 0.00 | . | . | [illegible] | [illegible] |
| Aug. 10, 1897 | F. E. Trask | 104.90 | 120.10 | 10.50 | e(9.42) | ... | . | 225.50 | 244.92 | 0.00 | ... | . | . | . | . | | . | 10 74 | | |
| Aug. 13, 1898 | do | 76.68 | 95.91 | 7.84 | f47.00 | ... | . | 180.43 | 227.43 | 0.00 | | | | | | | . | 8 94 | | |
| Aug. 14, 1898 | N. W. Stowell | ... | ... | ... | . | ... | . | ... | . | 0.00 | a24.00 | (0 50) | f18.00 | 0.00 | 90.00 | 0.00 | . | | 63 50 | [illegible] |
| Apr. 1, 1899 | do | 107.28 | 98.20 | . | . | . | . | 205.45 | | . | . | . | . | . | . | . | . | 9.40 | | . |
| Aug. 21, 1899 | E. T. Wright | a91.58 | 80.06 | . | {a27.00 / a75.00} | 50.17 | 24.78 | 172.58 | {a199.58 / a247.58} | 0.00 | . | . | . | . | .. | | . | . | | . |
| Aug. 25, 1899 | E. T. Wright and F. C. Finkle | | .. | . | . | | . | | | . | 8 18 | . | 9 00 | | 61 00 | | 93 40 | | 117 01 | 807 14 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apr. 1, 1899 | Newman and Finkle...... | 107.25 | 98.20 | (5.00) | [e]85.60 | 72.60 | ....... | 210.45 | 246.05 | 0.00 | [e]15.40 | ....... | 7.90 | ....... | ....... | ....... | ....... | ....... | ....... | ....... |
| Feb. 3 and 5, 1900. | Newman, Trask, and Finkle...... | [m]97.06 | 77.23 | ....... | 17.06 | 54.88 | ....... | 174.28 | 191.84 | 0.00 | 3.91 | ....... | 1.46 | ....... | ....... | ....... | ....... | ....... | ....... | ....... |
| Feb. 11, 1900 | Trask and Finkle...... | ....... | ....... | ....... | ....... | ....... | ....... | ....... | ....... | ....... | 3.81 | 0.88 | 1.20 | ....... | 55.90 | ....... | 76.25 | ....... | 61.47 | 252.81 |

[a] China garden included in "D."
[b] Fall, 1897.
[c] Tunnel.
[d] Construction begun January, 1888.
[e] Length, 2,600 feet.
[f] 1 p. m.
[g] Caved in.
[h] August 4, well No. 2 cut.
[i] Exterior of tunnel begun, 11.
[j] Stowell.
[k] June 12, not pumped.
[l] July 24, not pumped.
[m] And China cienaga.
[n] Flow.
[o] Pumped.
[p] When Lone Star Tunnel was pumped.
[q] March 15.

NOTE.—By the law of Mar. 23, 1901, 40 California miner's inches equal 1 second-foot.

## [illegible]

[illegible]

[illegible]

*[illegible]*

[illegible]

| [illegible] | [illegible] | | | [illegible] | | |
|---|---|---|---|---|---|---|
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| *[illegible]* | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| *[illegible]* | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Water discharged from tributary streams and canals near the San Gabriel River basin above [illegible] Mon[illegible]*

Discharge for 24 hours.

| Stream. | Second-feet. | | | Acre-feet. | | | Passing [illegible] Mont. | |
|---|---|---|---|---|---|---|---|---|
| | Diversion. | Waste. | Total. | Diversion. | Waste. | Total. | Second-feet. | Acre-feet. |
| *Apr. [illegible], 19[illegible]* | | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | | | | | |
| [illegible] | | | | | | | | |
| [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] | | |
| [illegible] Canyon | | | | | | | | |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| *May [illegible], 19[illegible]* | | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| [illegible] | | | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| [illegible] | | | | | | | | |
| [illegible] Canyon | | | [illegible] | | [illegible] | | | |
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |

*Water discharged from tributary streams and canals near the Los Angeles River basin above Burban[illegible]*

Discharge for 24 hours.

| Stream. | Second-feet. | | | Acre-feet. | | |
|---|---|---|---|---|---|---|
| | Diversion. | Waste. | Total. | Diversion. | Waste. | Total. |
| *Apr. [illegible], 19[illegible].* | | | | | | |
| Tujunga | | [illegible] | [illegible] | | [illegible] | [illegible] |
| Little Tujunga | | [illegible] | [illegible] | | [illegible] | [illegible] |
| Pacoima | | [illegible] | [illegible] | | [illegible] | [illegible] |
| | | [illegible] | [illegible] | | [illegible] | [illegible] |
| *May [illegible], 19[illegible]* | | | | | | |
| Tujunga | | | | | [illegible] | |
| Little Tujunga | | | | | [illegible] | |
| Pacoima | | [illegible] | | | [illegible] | |
| | | [illegible] | [illegible] | | [illegible] | |
| *June [illegible], 19[illegible]* | | | | | | |
| Tujunga | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Little Tujunga | | | | | | |
| Pacoima | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |

## SAN GABRIEL RIVER BASIN.

### SAN GABRIEL RIVER AND CANALS NEAR AZUSA, CAL.

This station, which is located just above the road crossing at the mouth of the canyon, about one-fourth mile above the Pasadena Light & Power Co.'s power house and 2 miles north of Azusa, in the NW. [illegible] sec. 23, T. 1 N., R. 10 W., S. B. M., was established in 189[illegible]. Estimates of flow were very unsatisfactory until after the completion of the power canal in 189[illegible].

## [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | | |
|---|---|---|---|---|---|
| | | | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Discharge measurements of San Gabriel River and canals near Azusa, Cal., [illegible]*—Continued.

| Date | Hydrographer | Gage height | Discharge: River | Canals | Total |
|---|---|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| [illegible] | | | | | |
| [illegible] 1 | J. B. Lippincott | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | | |
| [illegible] | do | [illegible] | [illegible] | | |
| [illegible] | do | [illegible] | [illegible] | | |
| [illegible] | do | [illegible] | [illegible] | | |
| 16 | H. F. Parkinson | | | [illegible] | [illegible] |
| [illegible] 2[illegible] | do | [illegible] | | [illegible] | [illegible] |
| [illegible] | do | 1[illegible] | 13[illegible] | | |
| 19[illegible] | | | | | |
| [illegible] | do | [illegible] | 4[illegible] | | |
| [illegible] | do | [illegible] | 1[illegible] | | |
| M[illegible] | do | [illegible] | 3[illegible] | | |
| [illegible] | do | [illegible] | [illegible] | | |
| [illegible] | do | | [illegible] | | |
| Nov. 21 | S. G. Bennett | | | 46 | 46[illegible] |
| 1[illegible] | | | | | |
| [illegible] 7 | S. G. Bennett | [illegible] | a 2,[illegible] | [illegible] | 2,[illegible] |
| F[illegible] | do | [illegible] | [illegible] | 65 | |
| [illegible] | do | [illegible] | a 6[illegible] | | 6[illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | |
| M[illegible] | do | [illegible] | [illegible] | [illegible] | |
| [illegible] | do | [illegible] | 9[illegible] | 3[illegible] | [illegible] |
| [illegible] 1[illegible] | do | | [illegible] | [illegible] | [illegible] |
| Sept. 1 | do | | 1[illegible] | | |
| 19[illegible] | | | | | |
| [illegible] 2[illegible] | W. B. Clapp | [illegible] | [illegible] | 5[illegible] | [illegible] |
| Feb. 2[illegible] | J. B. Lippincott | 2[illegible] | [illegible] | 6[illegible] | [illegible] |
| M[illegible] 6 | J. Ait[illegible] | [illegible] | 4[illegible] | 6 | [illegible] |
| A[illegible] 5 | S. G. Bennett | 1[illegible] | 2[illegible] | 4[illegible] | [illegible] |
| June 1[illegible] | do | | [illegible] | [illegible] | 2[illegible] |
| Sept. 1[illegible] | W. B. Clapp | | | | [illegible] |
| 19[illegible] | | | | | |
| J[illegible] 29 | C. A. Mu[illegible] | 3[illegible] | [illegible] | [illegible] | [illegible] |
| F[illegible] | W. B. Clapp | 1[illegible] | [illegible] | [illegible] | [illegible] |
| Mar. [illegible] | do | 1[illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | | [illegible] | |
| Apr. [illegible] | do | [illegible] | 8[illegible] | [illegible] | 8[illegible] |
| May 2[illegible] | do | [illegible] | [illegible] | [illegible] | [illegible] |
| June 1[illegible] | do | 1[illegible] | [illegible] | [illegible] | [illegible] |
| 1[illegible] | do | 1[illegible] | [illegible] | [illegible] | [illegible] |
| Sept. 1[illegible] | do | | | | [illegible] |
| 190[illegible] | | | | | |
| Mar. 1[illegible] | Clapp and Murphy | | [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | W. B. Clapp | 1[illegible] | [illegible] | [illegible] | [illegible] |
| 1[illegible] | Clapp and Webb | 1[illegible] | [illegible] | [illegible] | [illegible] |
| 190[illegible] | | | | | |
| Feb. 1[illegible] | E. C. La Rue | 2[illegible] | 1[illegible] | [illegible] | 2[illegible] |
| 1[illegible] | do | [illegible] | | [illegible] | [illegible] |
| Mar. 1[illegible] | R. S. Hawley | [illegible] | 1[illegible] | [illegible] | 1[illegible] |
| 1[illegible] | W. B. Clapp | [illegible] | 2[illegible] | [illegible] | 2[illegible] |
| 1[illegible] | R. S. Hawley | [illegible] | 3[illegible] | [illegible] | 3[illegible] |
| 2[illegible] | do | [illegible] | | [illegible] | |
| 3[illegible] | do | [illegible] | [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | do | [illegible] | [illegible] | [illegible] | |
| 1[illegible] | do | [illegible] | 1[illegible] | [illegible] | 2[illegible] |
| May 2 | do | 4[illegible] | [illegible] | [illegible] | [illegible] |
| 9 | do | [illegible] | [illegible] | [illegible] | [illegible] |
| June [illegible] | do | [illegible] | [illegible] | [illegible] | |
| 2[illegible] | W. B. Clapp | [illegible] | [illegible] | [illegible] | 1[illegible] |
| July 5 | Hawley and Clapp | [illegible] | [illegible] | [illegible] | [illegible] |
| Nov. 4 | W. B. Clapp | | [illegible] | [illegible] | [illegible] |
| 190[illegible] | | | | | |
| Jan. 1[illegible] | M. P. Beeson | [illegible] | [illegible] | [illegible] | [illegible] |
| 2[illegible] | do | [illegible] | [illegible] | [illegible] | [illegible] |
| 2[illegible] | do | [illegible] | [illegible] | [illegible] | [illegible] |
| Feb. 10 | do | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | do | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | do | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | do | [illegible] | 4[illegible] | 4[illegible] | [illegible] |

a Calculated by Kutter's formula.

[illegible]

*[illegible] measurements of San Gabriel River and canals near Azusa, Cal. [illegible]—Continued.*

[illegible]

[illegible]

| |
|---|
| [illegible] |

| |
|---|
| [illegible] |

| |
|---|
| [illegible] |

| |
|---|
| [illegible] |

STREAM MEAS[illegible]

[illegible] gage height [illegible]

| Day | Jan. | Feb. | Mar. | Apr | May | [illegible] |
| --- | --- | --- | --- | --- | --- | --- |
| 1905 | | | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Date | Hydrographer | |
|---|---|---|
| [illegible] | [illegible] | [illegible] |
| Aug. 31, 1900 | ... Wright | [illegible] |
| Aug. 20, 1900 | ... Wright and ... | [illegible] |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apr. 1, 1899 | Newman and Finkle...... | 107.25 | 98.20 | (5.00) | [q]35.60 | 72.60 | ...... | 210.45 | 246.05 | 0.00 | [q]15.49 | ...... | 7.90 | ...... | ...... | ...... | ...... | ...... | ...... | ...... |
| Feb. 3 and 5, 1900. | Newman, Trask, and Finkle...... | [m]97.06 | 77.22 | ...... | 17.06 | 54.88 | ...... | 174.28 | 191.34 | 0.00 | 3.91 | ...... | 1.45 | ...... | ...... | ...... | ...... | ...... | ...... | ...... |
| Feb. 11, 1900 | Trask and Finkle...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | ...... | 3.81 | 0.56 | 1.20 | ...... | 55.90 | ...... | 76.25 | ...... | 61.47 | 262.81 |

[a] China garden included in "D."
[b] Fall, 1897.
[c] Tunnel.
[d] Construction begun January, 1888.
[e] Length, 2,600 feet.
[f] 1 p. m.
[g] Caved in.
[h] August 4, well No. 2 cut.
[i] Exterior of tunnel begun, 11.
[j] Stowell.
[k] June 12, not pumped.
[l] July 24, not pumped.
[m] And China cienaga.
[n] Flow.
[o] Pumped.
[p] When Lone Star Tunnel was pumped.
[q] March 15.

NOTE.—By the law of Mar. 23, 1901, 40 California miner's inches equal 1 second-foot.

*Tabulation of measurements of cienagas and developments at Red Hill, Cal., as indicated in miner's inches*

[Fifty miner's inches to one second-foot.]

| Date. | Hydrographer. | East side: Creek Div. box, 40-inch line. | East side: Div. box 1 16-inch line and V tunnel built in 1886-1887. | East side: China cienaga. | East side: Lone Star Spring tunnel. | East side: Y tunnel built prior to 1886. | East side: Cienaga below No. 1. | East side: Total without Lone Star. | East side: Total. | West side: Spring inflow of tunnel No. 2 portal. | West side: W. cienaga "D." | West side: Pinto Spring, cienaga. | West side: Artesian wells No. 1 and 2. | West side: Tunnel spring. | West side: Tunnel No. 2 water. | West side: China garden. | West side: Stowell wells [illegible]. | West side: Main [illegible]. | West side: Total. | Grand total Red Hill. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sept. 26, 1885 | Wm. M. Fitzhugh | 225.30 | . . . | 51.73 | (2.02) | {0.61, 9.61, 16.22} | . | 203.31 | 205.33 | 50.47 | 43.27 | (0.00) | . | (1.00) | | | | 10.81 | 111.74 | 400.07 |
| Nov. 30, 1886 | J. P. Culver | 261.43 | 64.67 | 11.40 | 2.02 | . | . | 337.50 | 339.57 | 9.50 | {5.70, 97.80, .00, 104.40} | 18.40 | . | 2.10 | . | (a) | . | 21.81 | 114.66 | [illegible] |
| July 24, 1887 | F. Eaton | 147.50 | 160.50 | (10.00) | (2.00) | 163.00 | . | 327.00 | 329.00 | 13.07 | 31.90 | 10.00 | (b) | (1.00) | | (10.70) | . | 11.80 | [illegible] | [illegible] |
| July 13, 1888 | J. P. Culver | 155.78 | 181.61 | 18.10 | a13.50 | 138.02 | 46.43 | 357.10 | 371.08 | 8.14 | 38.89 | 5.38 | 15.14 | 1.50 | 417.70 | 10.70 | . | 17.70 | [illegible] | [illegible] |
| July 13, 1889 | E. T. Wright | 184.58 | 163.57 | 13.27 | 0.78 | 130.23 | 48.30 | 361.42 | 371.20 | 8.04 | 40.55 | 17.83 | 15.14 | 1.81 | 64.09 | 10.70 | . | 20.07 | [illegible] | [illegible] |
| July 14, 1890 | do | 260.08 | 228.53 | 17.39 | 10.85 | 150.01 | 72.52 | 505.88 | 510.73 | 8.08 | 71.08 | 30.53 | 18.08 | 0.02 | 71.82 | 10.70 | . | [illegible] | 211.07 | 727.80 |
| Do | J. P. Culver | 266.82 | 238.04 | 18.50 | 11.25 | 165.55 | 72.40 | 523.30 | 534.01 | 8.14 | 81.78 | 31.47 | 14.20 | 2.38 | 75.42 | 10.70 | . | [illegible] | [illegible] | 750.[illegible] |
| June 29, 1893 | E. T. Wright | . . . | . . . | . . . | . | . . . | . . . | | . . . | . | . | 13.20 | . | . | | | . | 10.42 | | |
| July 14, 1893 | do | . . . | . . . | . . . | . | 152.42 | . . . | . . . | . . . | | . | . | . | . | 30.40 | | . | | | . |
| Sept. 15, 1894 | do | f180.81 | 182.84 | 18.14 | (8.00) | 141.10 | 41.74 | 350.20 | 364.20 | . | | . | . | . | . | | . | [illegible] | | . |
| June 12, 1895 | do | 196.53 | 154.87 | 91.00 | (7.00) | (110.00) | (44.27) | 374.40 | 381.40 | . | | | | . | | | . | [illegible] | | |
| June 14, 1896 | N. W. Stowell | . . . | . . . | . . . | . | . | . | . | . | 0.00 | 22.00 | 1.00 | 21.00 | | g18.00 | | 0.00 | . | 64.00 | [illegible] |
| Aug. 20, 1896 | F. E. Trask | 132.40 | 137.90 | 11.25 | (7.00) | . . . | . | 281.55 | 288.55 | . | . | . | . | . | | | | [illegible] | | |
| Mar. 2, 1897 | N. W. Stowell | . . . | . . . | . . . | . . . | . . . | . | . . | | . | . | . | . | . | | | 40.00 | | | . |
| Aug. 5, 1897 | do | . . . | . . . | . . . | 9.42 | . | . . . | . . | | 0.00 | {20.00, 7.00, 27.00} | (0.50) | h20.20 | 0.00 | 41.40 | 0.00 | . | | [illegible] | [illegible] |
| Aug. 10, 1897 | F. E. Trask | 104.90 | 120.10 | 10.50 | i(9.42) | . . . | . . . | 235.50 | 244.92 | 0.00 | . . . | . | . | . | . | | . | [illegible] | | . |
| Aug. 13, 1898 | do | 76.68 | 95.91 | 7.84 | j47.00 | . . . | . . . | 180.43 | 227.43 | 0.00 | | | | | | | . | [illegible] | | |
| Aug. 14, 1898 | N. W. Stowell | . . . | . . . | . . . | . | . . . | . . . | . . . | | 0.00 | k24.00 | (0.50) | l13.00 | 0.00 | [illegible] | 0.00 | . | | [illegible] | [illegible] |
| Apr. 1, 1899 | do | 107.25 | 98.20 | . . . | . . . | . | . . . | 205.45 | | . | . | . | . | . | . | . . | . | [illegible] | | |
| Aug. 21, 1899 | E. T. Wright | m91.58 | 80.05 | . . . | {n27.00, o75.00} | 50.17 | 24.78 | 172.53 | {n199.53, p247.53} | 0.00 | . | . | . | . | . . | | . | . | | |
| Aug. 25, 1899 | E. T. Wright and F. C. Finkle | | . | . | . . | | . | | | . | [illegible] | . | 2.00 | . | [illegible] | | [illegible] | | [illegible] | [illegible] |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apr. 1, 1899 | Newman and Finkle...... | 107.25 | 98.20 | (5.00) | [e]35.60 | 72.60 | ........ | 210.45 | 246.05 | 0.00 | [o]15.49 | ........ | 7.90 | ........ | ........ | ........ | ........ | ........ | ........ | ........ |
| Feb. 3 and 5, 1900. | Newman, Trask, and Finkle...... | [m]97.06 | 77.22 | ........ | 17.06 | 54.88 | ........ | 174.28 | 191.34 | 0.00 | 3.91 | ........ | 1.45 | ........ | ........ | ........ | ........ | ........ | ........ | ........ |
| Feb. 11, 1900 | Trask and Finkle...... | ........ | ........ | ........ | ........ | ........ | ........ | ........ | ........ | ........ | 3.81 | 0.56 | 1.20 | ........ | 55.90 | ........ | 76.25 | ........ | 61.47 | 262.81 |

[a] China garden included in "D."
[b] Fall, 1897.
[c] Tunnel.
[d] Construction begun January, 1888.
[e] Length, 2,600 feet.
[f] 1 p. m.
[g] Caved in.
[h] August 4, well No. 2 cut.
[i] Exterior of tunnel begun, 11.
[j] Stowell.
[k] June 12, not pumped.
[l] July 24, not pumped.
[m] And China cienaga.
[n] Flow.
[o] Pumped.
[p] When Lone Star Tunnel was pumped.
[q] March 15.

NOTE.—By the law of Mar. 23, 1901, 40 California miner's inches equal 1 second-foot.

## WATER ABSORBED IN SAND AND GRAVELS.

During the winter of 1902–3 the precipitation in southern California was greater than at any time during the preceding 10 years. This resulted in heavy irrigation during the spring of 1903, many irrigators taking advantage of this condition to thoroughly saturate the soil at a time when water was plenty and cheap, thereby saving much expense and vexation which always accompanies a late irrigation when water is scarce, expensive, and in greater demand than can be supplied.

Immediately following the rain of April 14, 1903, a series of measurements were made by W. B. Clapp under the direction of the United States Geological Survey to determine the amount of water being absorbed in the sand and gravel washes of the larger tributary streams of the three principal river basins of southern California—Santa Ana, San Gabriel, and Los Angeles rivers. Measurements were taken at the mouths of the canyons where the streams leave the mountains, at all canal diversions, and at such intervals along the streams as time and the available force detailed for this work would allow, the location of the point where the stream entirely disappeared or left the valley being noted in all cases. These measurements show the amount of water taken up in the sand and gravel wash of this stream on the days given, and the following tables give this amount in second-feet and acre-feet for a period of 24 hours:

*Water discharged from tributary streams and sinking in the Santa Ana River basin above Colton, Cal.*

[Discharge for 24 hours.]

| Stream. | Second-feet. | | | Acre-feet. | | |
|---|---|---|---|---|---|---|
| | Diversion. | Waste. | Total. | Diversion. | Waste. | Total. |
| *April 1, 1903.* | | | | | | |
| Santa Ana | [illegible] | [illegible] | [illegible] | 32 | [illegible] | [illegible] |
| Mill Creek | 5 | 34 | 39 | 10 | 67 | [illegible] |
| Plunge Creek | ...... | 23 | 23 | ...... | 46 | 46 |
| City Creek | ...... | 22 | 22 | ...... | 44 | 44 |
| East Twin Creek | ...... | 10 | 10 | ...... | 20 | [illegible] |
| West Twin Creek | ...... | 5.4 | 5.4 | ...... | [illegible] | [illegible] |
| Lytle Creek | 7 | 36 | 43 | 14 | [illegible] | [illegible] |
| | 35 | 270 | 305 | [illegible] | 535 | [illegible] |
| *May 19, 1903.* | | | | | | |
| Santa Ana | 47 | 48 | 95 | 93 | 95 | [illegible] |
| Mill Creek | 48 | 19 | 65 | 95 | 38 | [illegible] |
| Plunge Creek | 6 | 3 | 9 | 12 | 6 | [illegible] |
| City Creek | 7 | 4 | 11 | 14 | 8 | [illegible] |
| East Twin Creek | 2 | 3 | 5 | 4 | 6 | [illegible] |
| West Twin Creek | 2 | 2 | 4 | 4 | 4 | [illegible] |
| Lytle Creek | 15 | 14 | 29 | 30 | 28 | [illegible] |
| | 125 | 98 | 221 | 254 | 195 | [illegible] |

*Water discharged from tributary streams and sinking in the San Gabriel River basin above El Monte, Cal.*

[Discharge for 24 hours.]

| Stream. | Second-feet. | | | Acre-feet. | | | Passing El Monte. | |
|---|---|---|---|---|---|---|---|---|
| | Diversion. | Waste. | Total. | Diversion. | Waste. | Total. | Second feet. | Acre-feet. |
| *Apr. 26, 1903.* | | | | | | | | |
| San Gabriel | 40 | 285 | 325 | 79 | 565 | 644 | 229 | 454 |
| San Dimas | ........ | 19 | 19 | ........ | 38 | 38 | ........ | ...... |
| Dalton | ........ | 9 | 9 | ........ | 18 | 18 | ........ | ...... |
| Santa Anita | ........ | 40 | 40 | ........ | 79 | 79 | ........ | ...... |
| Eaton Canyon | ........ | 29 | 29 | ........ | 57 | 57 | ........ | ...... |
| | 40 | 382 | 422 | 79 | 757 | 836 | 229 | 454 |
| *May 23, 1903.* | | | | | | | | |
| San Gabriel | 70 | 97 | 167 | 139 | 192 | 331 | ........ | ...... |
| San Dimas | 2 | .5 | 2.5 | 4 | 1 | 5 | ........ | ...... |
| Dalton | 1.3 | 1.4 | 2.7 | 26 | 2.8 | 5.4 | ........ | ...... |
| Santa Anita | 3 | 10 | 13 | 6 | 20 | 26 | ........ | ...... |
| Eaton Canyon | 3 | 3 | 6 | 6 | 6 | 12 | ........ | ...... |
| | 79 | 112 | 191 | 158 | 222 | 380 | ........ | ...... |

*Water discharged from tributary streams and sinking in the Los Angeles River basin above Burbank, Cal.*

[Discharge for 24 hours.]

| Stream. | Second-feet. | | | Acre-feet. | | |
|---|---|---|---|---|---|---|
| | Diversion. | Waste. | Total. | Diversion. | Waste. | Total. |
| *Apr. 18, 1903.* | | | | | | |
| Tujunga | ........ | 157 | 157 | ........ | 311 | 311 |
| Little Tujunga | ........ | 27 | 27 | ........ | 54 | 54 |
| Pacoima | ........ | 98 | 98 | ........ | 194 | 194 |
| | ........ | 282 | 282 | ........ | 559 | 559 |
| *May 5, 1903.* | | | | | | |
| Tujunga | ........ | 37 | 37 | ........ | 73 | ........ |
| Little Tujunga | ........ | 4 | 4 | ........ | 8 | ........ |
| Pacoima | ........ | 24 | 24 | ........ | 48 | ........ |
| | ........ | 65 | 65 | ........ | 129 | ........ |
| *June 4, 1903.* | | | | | | |
| Tujunga | 3 | 9.3 | 12.3 | 6 | 18 | 24 |
| Little Tujunga | ........ | .7 | .7 | ........ | 1.4 | 1.4 |
| Pacoima | 3 | 5 | 8 | 6 | 10 | 16 |
| | 6 | 15 | 21 | 12 | 29.4 | 41.4 |

## SAN GABRIEL RIVER BASIN.

### SAN GABRIEL RIVER AND CANALS NEAR AZUSA, CAL.

This station, which is located just above the road crossing at the mouth of the canyon, about one-fourth mile above the Pacific Light & Power Co.'s power house and 2 miles north of Azusa, in the NW. ¼ sec. 23, T. 1 N., R. 10 W., S. B. M., was established in 1895. Estimates of flow were very unsatisfactory until after the completion of the power canal in 1898.

The station is well below all tributaries and is 5 miles below the intake of the power canal.

The gage is an inclined staff in several sections, on the left bank.

Discharge measurements are made from a car and cable near the gage.

The flow in the power canal was measured by a weir but is now computed from the kilowatt output of the power plant and is added to that at the station to obtain the total flow of the stream. During the spring months additional water is diverted about 500 feet above the station and is used for irrigation. The acquired water rights greatly exceed the low-water flow of the stream.

The channel is composed of gravel and bowlders and is subject to considerable change, especially above and below the measuring section. The current is swift, and measurements at flood stages are difficult. Various temporary diversions for irrigation just above the station affect the discharge.

*Discharge measurements of San Gabriel River and canals near Azusa, Cal., in 1895–1912.*

| Date. | Hydrographer. | Gage height of river. | Discharge. River. | Discharge. Canals. | Discharge. Total. |
|---|---|---|---|---|---|
| **1895.** | | *Feet.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Sept. 10 | J. B. Lippincott | 1.19 | | | 34.9 |
| Nov. 5 | do | 1.5 | 10.4 | 2.8 | 13.2 |
| Dec. 11 | do | | .0 | 37.5 | 37.5 |
| 21 | do | 1.9 | 27.3 | 26.6 | 53.9 |
| **1896.** | | | | | |
| Feb. 19 | J. B. Lippincott | 1.25 | 4.88 | 33.0 | 37.9 |
| Mar. 22 | do | 2.27 | 69.9 | 35.2 | 105 |
| Apr. 30 | do | | .0 | 55.2 | 55.2 |
| June 17 | do | | 19.9 | 5.53 | 25.4 |
| July 22 | J. H. Quinton | | .0 | 26.7 | 26.7 |
| Nov. 22 | J. B. Lippincott | | .0 | 21.1 | 21.1 |
| **1897.** | | | | | |
| Jan. 10 | J. B. Lippincott | 1.28 | 4.50 | 21.6 | 26.1 |
| 25 | do | 2.00 | 57.8 | 17.3 | 75.1 |
| Feb. 1 | do | 5.1 | 1,725 | .0 | 1,725 |
| 2 | do | 3.4 | 422 | .0 | 422 |
| Mar. 12 | do | 3.3 | 410 | 18.0 | 428 |
| Apr. 29 | do | 2.6 | 162 | 71.3 | 233 |
| May 24 | do | 2.08 | 76.0 | 67.9 | 144 |
| June 30 | A. S. Campbell | | .0 | 55.7 | 55.7 |
| July 6 | do | | .0 | 53.9 | 53.9 |
| Aug. 7 | do | 2.33 | .0 | 31.4 | 31.4 |
| Sept. 1 | do | 2.2 | .0 | 24.2 | 24.2 |
| 29 | do | 2.1 | .0 | 19.3 | 19.3 |
| Nov. 13 | do | | 7.56 | 24.2 | 31.8 |
| 27 | J. B. Lippincott | | 3.50 | 32.9 | 36.4 |
| 28 | do | | | | 42.1 |
| **1898.** | | | | | |
| Jan. 12 | J. B. Lippincott | 1.38 | 23.3 | 25.0 | 48.3 |
| Mar. 8 | H. F. Crowe | | .0 | 49.2 | 49.2 |
| Apr. 2 | J. B. Lippincott | | .0 | 41.2 | 41.2 |
| May 10 | do | | .0 | 23.3 | 23.3 |
| 17 | do | 1.03 | 15.4 | 44.6 | 60.0 |
| July 1 | F. H. Olmsted | | .0 | 15.4 | 15.4 |
| 21 | J. B. Lippincott | | .0 | 13.2 | |
| Aug. 16 | do | | | 5.78 | |
| 21 | do | | | 5.78 | |
| 22 | do | | .0 | 6.20 | 6.20 |
| 23 | do | | .0 | 8.48 | 8.48 |

*Discharge measurements of San Gabriel River and canals near Azusa, Cal., in 1895–1912*—Continued.

| Date. | Hydrographer. | Gage height of river. | Discharge. | | |
|---|---|---|---|---|---|
| | | | River. | Canals. | Total. |
| **1899.** | | *Feet.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Jan. 11 | J. B. Lippincott | 1.16 | 15.9 | 33.3 | 49.2 |
| 12 | | 1.08 | 12.0 | | |
| 13 | | .90 | 16.0 | | |
| 14 | | .78 | 2.0 | | |
| 15 | | .70 | 1.0 | | |
| 16 | H. F. Parkinson | | | | 18.0 |
| Aug. 26 | .....do | | .0 | 5.5 | 5.5 |
| Oct. 14 | | 1.10 | 13.0 | | |
| **1900.** | | | | | |
| Jan. 3 | | | 49.0 | | |
| 4 | | | 19.0 | | |
| May 5 | | | 38.0 | | |
| 6 | | | 26.0 | | |
| 11 | | | 9.0 | | |
| Nov. 21 | S. G. Bennett | | .0 | 46.3 | 46.3 |
| **1901.** | | | | | |
| Jan. 7 | S. G. Bennett | 6.16 | [a] 2,710 | .0 | 2,710 |
| Feb. 4 | .....do | 2.30 | 112 | 65.0 | 177 |
| 5 | .....do | 7.6 | [a] 6,250 | .0 | 6,250 |
| 22 | .....do | 4.1 | 700 | 65 | 765 |
| Mar. 5 | .....do | 3.0 | 248 | 65 | 313 |
| 29 | .....do | 2.25 | 96.5 | 33.0 | 130 |
| July 11 | .....do | | .0 | 31.6 | 31.6 |
| Sept. 19 | .....do | | 15.6 | | |
| **1902.** | | | | | |
| Jan. 25 | W. B. Clapp | | .0 | 50.9 | 50.9 |
| Feb. 26 | J. B. Lippincott | 2.05 | 126 | 64.0 | 190 |
| Mar. 6 | J. Ahern | 1.57 | 46.2 | 62.0 | 108 |
| Apr. 8 | S. G. Bennett | 1.4 | 26.0 | 44.6 | 70.6 |
| June 12 | .....do | | .0 | 25.7 | 25.7 |
| Sept. 1 | W. B. Clapp | | | | 5.0 |
| **1903.** | | | | | |
| Jan. 29 | C. A. Miller | 3.20 | 467 | 64 | 531 |
| Feb. 5 | W. B. Clapp | 1.70 | 56 | 70 | 126 |
| Mar. 23 | .....do | 1.05 | 11 | 72 | 83 |
| 25 | .....do | 3.50 | 570 | 72 | 642 |
| Apr. 1 | .....do | 7.95 | 8,430 | 72 | 8,500 |
| May 23 | .....do | 2.20 | 97 | 70 | 167 |
| June 10 | .....do | 1.70 | 38 | 70 | 108 |
| 13 | .....do | 1.50 | 20 | 81 | 101 |
| Sept. 14 | .....do | | | | 27.5 |
| **1904.** | | | | | |
| Mar. 18 | Clapp and Murphy | | .0 | 43 | 43 |
| Apr. 8 | W. B. Clapp | 1.30 | 14 | 68 | 82 |
| 19 | Clapp and Webb | 1.58 | 38 | 66 | 104 |
| **1905.** | | | | | |
| Feb. 10 | E. C. La Rue | 2.20 | 190 | 66 | 256 |
| 17 | .....do | 3.50 | 560 | 66 | 626 |
| Mar. 12 | R. S. Hawley | 9.30 | 11,055 | 72 | 11,127 |
| 14 | W. B. Clapp | 5.30 | 2,030 | 70 | 2,100 |
| 16 | R. S. Hawley | 5.80 | 3,225 | 80 | 3,305 |
| 24 | .....do | 4.20 | 611 | 54 | 665 |
| 31 | .....do | 3.80 | 400 | 80 | 480 |
| Apr. 13 | .....do | 3.45 | 262 | 80 | 342 |
| 19 | .....do | 3.30 | 190 | 80 | 270 |
| May 2 | .....do | 4.12 | 553 | 80 | 633 |
| 9 | .....do | 3.50 | 288 | 80 | 368 |
| June 5 | .....do | 2.91 | 97 | 80 | 177 |
| 23 | W. B. Clapp | 2.60 | 41 | 84 | 125 |
| July 5 | Hawley and Clapp | 2.28 | 17 | 85 | 102 |
| Nov. 4 | W. B. Clapp | | 00 | 30 | 30 |
| **1906.** | | | | | |
| Jan. 19 | M. P. Beeson | 3.88 | 375 | 0 | 375 |
| 20 | .....do | 2.90 | 104 | 76 | 180 |
| 20 | .....do | 2.95 | 110 | 76 | 186 |
| Feb. 10 | .....do | 1.70 | 3.5 | 57 | 60 |
| 15 | .....do | 2.70 | 60 | 15 | 75 |
| 15 | .....do | 2.70 | 69 | 15 | 84 |
| 17 | .....do | 2.60 | 49 | 40 | 89 |

[a] Calculated by Kutter's formula.

*Daily gage height, in feet, of San Gabriel River near Azusa, Cal., for 1899–1904*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900. | | | | | | | 1901. | | | | | | |
| 1 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25 | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 26 | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | 27 | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | 28 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | 29 | [illegible] | | [illegible] | [illegible] | | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | 30 | [illegible] | | [illegible] | [illegible] | | [illegible] |
| | | | | | | | 31 | [illegible] | | [illegible] | | | [illegible] |

| Day. | Feb. | Mar. | Apr. | Day. | Feb. | Mar. | Apr. | Day. | Feb. | Mar. | Apr. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902. | | | | 1902. | | | | 1902. | | | |
| 1 | | [illegible] | [illegible] | 11 | | [illegible] | [illegible] | 21 | | [illegible] | [illegible] |
| 2 | | [illegible] | [illegible] | 12 | | [illegible] | [illegible] | 22 | | [illegible] | [illegible] |
| 3 | | [illegible] | [illegible] | 13 | | [illegible] | [illegible] | 23 | | [illegible] | [illegible] |
| 4 | | [illegible] | [illegible] | 14 | | [illegible] | [illegible] | 24 | | [illegible] | [illegible] |
| 5 | | [illegible] | [illegible] | 15 | | [illegible] | [illegible] | 25 | | [illegible] | [illegible] |
| 6 | | [illegible] | [illegible] | 16 | | [illegible] | [illegible] | 26 | [illegible] | [illegible] | [illegible] |
| 7 | | [illegible] | [illegible] | 17 | | [illegible] | [illegible] | 27 | [illegible] | [illegible] | [illegible] |
| 8 | | [illegible] | [illegible] | 18 | | [illegible] | [illegible] | 28 | [illegible] | [illegible] | [illegible] |
| 9 | | [illegible] | [illegible] | 19 | | [illegible] | [illegible] | 29 | | [illegible] | [illegible] |
| 10 | | [illegible] | [illegible] | 20 | | [illegible] | [illegible] | 30 | | [illegible] | [illegible] |
| | | | | | | | | 31 | | [illegible] | |

| Day. | Nov. | Jan. | Feb. | Mar. | Apr. | May. | June. | Day. | Nov. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902–3. | | | | | | | | 1902–3. | | | | | | | |
| 1 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 16 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 17 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 18 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | | | [illegible] | [illegible] | 4.00 | [illegible] | [illegible] | 19 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 20 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22 | | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25 | | | | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | 1.20 | | [illegible] | 2.40 | [illegible] | [illegible] | [illegible] | 26 | | | | [illegible] | [illegible] | [illegible] | |
| 12 | | | [illegible] | 2.30 | [illegible] | [illegible] | [illegible] | 27 | | | | [illegible] | [illegible] | [illegible] | |
| 13 | | | [illegible] | [illegible] | 2.70 | [illegible] | [illegible] | 28 | | [illegible] | | [illegible] | [illegible] | [illegible] | |
| 14 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 29 | | [illegible] | | [illegible] | [illegible] | [illegible] | |
| 15 | | | 1.45 | 2.00 | 2.70 | 2.40 | 1.45 | 30 | | [illegible] | | [illegible] | [illegible] | [illegible] | |
| | | | | | | | | 31 | | [illegible] | | [illegible] | | [illegible] | |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | Day. | Jan. | Feb. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | | | 1904. | | | | | |
| 1 | | | 1.80 | 1.70 | 1.50 | 16 | | | | | |
| 2 | | | 1.10 | 1.60 | 1.50 | 17 | | | | | |
| 3 | | | | 1.55 | 1.45 | 18 | | | | | |
| 4 | | | | 1.50 | 1.40 | 19 | | | | 1.65 | |
| 5 | | | | 1.40 | 1.40 | 20 | | | | 1.70 | |
| 6 | | | | 1.40 | 1.35 | 21 | | | | 1.50 | |
| 7 | | | | 1.35 | 1.30 | 22 | | | | 1.40 | |
| 8 | | | | 1.30 | 1.25 | 23 | | | 4.15 | 1.35 | |
| 9 | | | | 1.20 | 1.20 | 24 | | | 2.40 | 1.30 | |
| 10 | | | | 1.10 | 1.15 | 25 | | | 2.00 | 1.20 | |
| 11 | | | 1.85 | .90 | 1.10 | 26 | | | 1.80 | 1.50 | |
| 12 | | | 1.20 | .75 | 1.00 | 27 | | | 1.70 | 1.45 | |
| 13 | | | | | .80 | 28 | | 3.30 | 1.70 | 1.40 | |
| 14 | | | | | | 29 | | 1.70 | 2.00 | 1.40 | |
| 15 | | | | | | 30 | | | 1.90 | 1.40 | |
| | | | | | | 31 | | | 1.80 | | |

*Daily gage height, in feet, of San Gabriel River near Azusa, Cal., for 1897–1912*—Con.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | | | 1905. | | | | | | | |
| 1 | ...... | 0 | 2.1 | [a]3.8 | 3.1 | 2.95 | 2.4 | 16 | ...... | [a]3.5 | 5.8 | [a]3.4 | 3.3 | 2.7 | 2.05 |
| 2 | ...... | 2.6 | 2.1 | [a]3.75 | 3.7 | 2.95 | 2.35 | 17 | ...... | [a]3.5 | 5.1 | [a]3.4 | 3.3 | 2.7 | 2.0 |
| 3 | ...... | 5.5 | 2.1 | [a]3.75 | 3.4 | 2.95 | 2.35 | 18 | ...... | 3.1 | 4.8 | [a]3.35 | 3.3 | 2.7 | 1.9 |
| 4 | ...... | [a]4.75 | 2.1 | [a]3.7 | 3.3 | 2.9 | 2.35 | 19 | ...... | 3.0 | 4.7 | 3.3 | 3.3 | 2.65 | 1.8 |
| 5 | ...... | 4.0 | 2.3 | [a]3.7 | 3.2 | 2.9 | 2.25 | 20 | ...... | 2.8 | 4.4 | 3.3 | 3.2 | 2.6 | 1.5 |
| 6 | ...... | 3.0 | 2.3 | [a]3.65 | 3.2 | 2.9 | 2.25 | 21 | ...... | 2.7 | 4.3 | 3.3 | 3.2 | 2.6 | ...... |
| 7 | ...... | 2.7 | 1.7 | [a]3.65 | 3.2 | 2.85 | 2.2 | 22 | 1.55 | 2.5 | 4.2 | 3.3 | 3.2 | 2.6 | ...... |
| 8 | ...... | 2.5 | 1.7 | [a]3.6 | 4.0 | 2.85 | 2.15 | 23 | ...... | 2.4 | 4.2 | 3.2 | 3.2 | 2.6 | ...... |
| 9 | ...... | 2.3 | 1.65 | [a]3.6 | 3.6 | 2.85 | 2.15 | 24 | ...... | 2.3 | 4.2 | 3.2 | 3.15 | 2.6 | ...... |
| 10 | ...... | 2.2 | 1.65 | [a]3.55 | 3.5 | 2.8 | 2.15 | 25 | ...... | 2.2 | 4.2 | 3.2 | 3.1 | 2.55 | ...... |
| 11 | ...... | 2.0 | 1.7 | [a]3.55 | 3.4 | 2.8 | 2.55 | 26 | ...... | 2.2 | [a]4.2 | 3.2 | 3.1 | 2.55 | ...... |
| 12 | ...... | 1.9 | 9.3 | [a]3.5 | 3.4 | 2.8 | 2.15 | 27 | ...... | 2.2 | [a]4.1 | 3.1 | 3.1 | 2.55 | ...... |
| 13 | ...... | 1.8 | [a]7.3 | 3.5 | 3.3 | 2.8 | 2.15 | 28 | ...... | 2.2 | [a]4.0 | 3.1 | 3.1 | 2.5 | ...... |
| 14 | ...... | 1.8 | 5.3 | 3.45 | 3.3 | 2.8 | 2.1 | 29 | ...... | ...... | 4.0 | 3.1 | 3.1 | 2.45 | ...... |
| 15 | ...... | [a]3.0 | 4.7 | [a]3.4 | 3.3 | 2.75 | 2.1 | 30 | ...... | ...... | [a]3.9 | 3.05 | 3.05 | 2.45 | ...... |
| | | | | | | | | 31 | ...... | ...... | 3.8 | ...... | 3.0 | ...... | ...... |

[a] Estimated.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|
| 1906. | | | | | | | | |
| 1 | ........ | ........ | ........ | 4.8 | 3.4 | 3.6 | 2.8 | 2.1 |
| 2 | ........ | ........ | ........ | 4.7 | 3.4 | 3.6 | 2.8 | 2.0 |
| 3 | ........ | ........ | ........ | 4.7 | 3.4 | 3.5 | 2.8 | 1.9 |
| 4 | ........ | ........ | 2.6 | 4.5 | 3.4 | 3.5 | 2.75 | 1.9 |
| 5 | ........ | ........ | 2.7 | 4.7 | 3.45 | 3.4 | 2.75 | 1.85 |
| 6 | ........ | ........ | ........ | 4.4 | 3.45 | 3.4 | 2.7 | 1.8 |
| 7 | ........ | ........ | ........ | 4.2 | 3.4 | 3.4 | 2.75 | 1.7 |
| 8 | ........ | ........ | ........ | 4.2 | 3.4 | 3.3 | 2.7 | 1.7 |
| 9 | ........ | ........ | ........ | 4.2 | 3.4 | 3.3 | 2.7 | 1.65 |
| 10 | ........ | ........ | ........ | 4.2 | 3.4 | 3.2 | 2.7 | 1.6 |
| 11 | ........ | ........ | ........ | 4.2 | 3.4 | 3.2 | 2.6 | 1.6 |
| 12 | ........ | ........ | 7.9 | 4.1 | 3.3 | 3.2 | 2.6 | 1.55 |
| 13 | ........ | 2.7 | 7.2 | 4.0 | 3.3 | 3.1 | 2.6 | 1.5 |
| 14 | ........ | 2.7 | 4.35 | 4.0 | 3.3 | 3.1 | 2.6 | 1.4 |
| 15 | ........ | 2.7 | 4.5 | 4.0 | 3.3 | 3.1 | 2.6 | 1.3 |
| 16 | ........ | 2.7 | 4.8 | 3.9 | 3.3 | 3.05 | 2.6 | ........ |
| 17 | ........ | 2.6 | 5.2 | 3.8 | 3.3 | 3.0 | 2.55 | ........ |
| 18 | ........ | 2.1 | 4.8 | 3.8 | 3.2 | 3.0 | 2.55 | ........ |
| 19 | 3.9 | 2.0 | 4.8 | 3.8 | 3.2 | 3.0 | 2.55 | ........ |
| 20 | 2.9 | 2.0 | 4.6 | 3.8 | 3.2 | 3.0 | 2.55 | ........ |
| 21 | 2.7 | 1.9 | 4.3 | 3.7 | 3.2 | 2.95 | 2.55 | ........ |
| 22 | 2.3 | 2.3 | 4.1 | 3.6 | 3.2 | 2.95 | 2.5 | ........ |
| 23 | 2.0 | 2.0 | 4.1 | 3.6 | 3.2 | 2.9 | 2.5 | ........ |
| 24 | 1.75 | 1.9 | 5.15 | 3.6 | 3.1 | 2.9 | 2.4 | ........ |
| 25 | 1.6 | 1.9 | 7.55 | 3.6 | 3.1 | 3.0 | 2.4 | ........ |
| 26 | ........ | 1.8 | 8.45 | 3.5 | 3.4 | 2.9 | 2.35 | ........ |
| 27 | ........ | ........ | 7.45 | 3.5 | 3.3 | 2.95 | 2.35 | ........ |
| 28 | ........ | ........ | 6.7 | 3.7 | 4.8 | 2.95 | 2.3 | ........ |
| 29 | ........ | ........ | 6.65 | 3.5 | 4.1 | 2.9 | 2.25 | ........ |
| 30 | ........ | ........ | 5.1 | 3.4 | 3.75 | 2.85 | 2.2 | ........ |
| 31 | ........ | ........ | 5.1 | ........ | 3.7 | ........ | 2.15 | ........ |

*Daily gage height, in feet, of San Gabriel River near Azusa, Cal., for 1897–1912*—Contd.

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | |
| 1 | | 3.2 | 4.2 | 4.2 | 5.7 | 4.3 | 3.7 | 2.8 | 2.6 | 2.2 |
| 2 | | 3.1 | 4.2 | 4.1 | 5.7 | 4.2 | 3.7 | 3.0 | 2.6 | 2.1 |
| 3 | | 2.9 | 4.6 | 4.1 | 5.7 | 4.2 | 3.7 | 3.2 | 2.5 | 2.1 |
| 4 | | 2.9 | 4.6 | 4.1 | 5.6 | 4.1 | 3.7 | 3.3 | 2.5 | 2.1 |
| 5 | | 2.2 | 4.7 | 7.6 | 5.5 | 4.1 | 3.7 | 3.2 | 2.5 | 2.0 |
| 6 | | 3.2 | 4.7 | 6.7 | 5.4 | 4.1 | 3.7 | 3.2 | 2.5 | 2.0 |
| 7 | | 3.6 | 4.5 | 6.2 | 5.3 | 4.0 | 3.7 | 3.2 | 2.5 | [illegible] |
| 8 | | 5.2 | 4.4 | 6.1 | 5.3 | 4.0 | 3.7 | 3.2 | 2.4 | |
| 9 | | 5.3 | 4.3 | 6.1 | 5.2 | 4.0 | 3.65 | 3.1 | 2.4 | |
| 10 | | 6.85 | 4.3 | 6.1 | 5.2 | 3.9 | 3.65 | 3.0 | 2.4 | |
| 11 | | 5.7 | 4.2 | 6.0 | 5.2 | 3.9 | 3.65 | 3.0 | 2.4 | |
| 12 | 4.0 | 5.5 | 4.2 | 5.4 | 5.2 | 3.9 | 3.65 | 3.0 | 2.4 | |
| 13 | 3.8 | 5.2 | 4.1 | 5.3 | 5.2 | 3.85 | 3.6 | 2.9 | 2.3 | |
| 14 | 3.5 | 4.5 | 4.1 | 5.2 | 5.2 | 3.85 | 3.6 | 2.8 | 2.3 | |
| 15 | 3.0 | 4.6 | 4.1 | 5.1 | 5.2 | 3.85 | 3.6 | 2.8 | 2.2 | |
| 16 | 2.3 | 4.5 | 4.1 | 4.8 | 5.0 | 3.85 | 3.6 | 2.8 | 2.2 | |
| 17 | 2.1 | 4.5 | 4.9 | 4.7 | 5.0 | 3.85 | 3.55 | 2.8 | 2.2 | |
| 18 | 2.1 | 4.6 | 4.9 | 4.6 | 4.9 | 3.85 | 3.55 | 2.7 | 2.2 | |
| 19 | 2.1 | 4.5 | 4.6 | 4.6 | 4.8 | 3.8 | 3.55 | 2.7 | 2.2 | |
| 20 | 1.8 | 4.3 | 4.2 | 4.7 | 4.7 | 3.8 | 3.5 | 2.7 | 2.2 | |
| 21 | | 4.1 | 4.2 | 6.1 | 4.7 | 3.8 | 3.5 | 2.7 | 2.1 | |
| 22 | | 4.0 | 4.9 | 5.8 | 4.6 | 3.8 | 3.45 | 2.6 | 2.1 | |
| 23 | | 4.0 | 4.6 | 5.3 | 4.6 | 3.8 | 3.45 | 2.6 | 2.1 | |
| 24 | | 3.9 | 4.3 | 5.8 | 4.6 | 3.8 | 3.4 | 2.6 | 2.1 | |
| 25 | | 4.1 | 4.3 | 6.0 | 4.6 | 3.8 | 3.4 | 2.6 | 2.1 | |
| 26 | | 4.2 | 4.2 | 6.5 | 4.5 | 3.8 | 3.4 | 2.6 | 2.1 | |
| 27 | 2.0 | 4.1 | 4.2 | 6.0 | 4.5 | 3.8 | 3.35 | 2.6 | 2.1 | |
| 28 | 5.2 | 4.1 | 4.2 | 6.0 | 4.4 | 3.75 | 3.35 | 2.6 | 2.1 | |
| 29 | 3.8 | 4.3 | | 6.0 | 4.4 | 3.75 | 3.3 | 2.6 | 2.1 | |
| 30 | 3.5 | 4.5 | | 6.0 | 4.4 | 3.75 | 3.3 | 2.6 | 2.1 | |
| 31 | 3.2 | 4.4 | | 5.8 | | 3.75 | | 2.6 | 2.2 | |

| Day. | Oct. | Nov. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1907-8. | | | | | | | | | | |
| 1 | | 2.1 | | 3.6 | 3.5 | 3.4 | 3.1 | 2.4 | | 2.7 |
| 2 | | 2.0 | | 3.6 | 3.4 | 3.4 | 3.2 | 2.3 | | |
| 3 | | | | 3.7 | 3.4 | 3.5 | 3.2 | 2.3 | | |
| 4 | | | | 4.7 | 3.3 | 3.4 | 3.1 | 2.3 | | |
| 5 | | | | 4.2 | 3.3 | 3.3 | 3.1 | 2.3 | | |
| 6 | | | | 4.0 | 3.3 | 3.3 | 3.1 | 2.3 | | |
| 7 | | | | 3.7 | 3.3 | 3.2 | 3.1 | 2.3 | | |
| 8 | | | | 3.6 | 3.2 | 3.1 | 3.0 | 2.3 | | |
| 9 | | | | 3.6 | 3.2 | 3.1 | 3.0 | 2.2 | | |
| 10 | | | | 3.9 | 3.1 | 3.0 | 3.3 | 2.2 | | |
| 11 | | | | 3.7 | 3.0 | 3.0 | 3.0 | | | |
| 12 | | | | 3.7 | 3.0 | 3.1 | 3.0 | | | |
| 13 | | | | 3.6 | 3.2 | 3.1 | 3.0 | | | |
| 14 | | | | 3.6 | 3.2 | 3.1 | 3.0 | | | |
| 15 | | | 2.4 | 3.4 | 3.2 | 3.2 | 2.9 | | | |
| 16 | 2.1 | | 2.2 | 3.4 | 3.6 | 3.2 | 2.9 | | | |
| 17 | 2.2 | | 2.0 | 3.4 | 3.7 | 3.1 | 2.9 | | | |
| 18 | 2.1 | | | 3.4 | 3.7 | 3.1 | 2.8 | | | |
| 19 | 2.0 | | | 3.4 | 3.7 | 3.1 | 2.8 | | | |
| 20 | 2.0 | | | 3.4 | 3.7 | 3.0 | 2.8 | | | |
| 21 | | | | 3.4 | 3.7 | 3.0 | 2.8 | | | |
| 22 | | | | 3.4 | 3.6 | 3.0 | 2.5 | | | |
| 23 | | | | 3.4 | 3.4 | 3.1 | 2.5 | | | |
| 24 | 2.0 | | 4.8 | 3.3 | 3.4 | 3.1 | 2.5 | | | |
| 25 | 2.1 | | 5.3 | 3.3 | 3.6 | 3.1 | 2.5 | | | |
| 26 | 2.0 | | 4.5 | 3.3 | 3.6 | 3.0 | 2.5 | | | |
| 27 | 2.3 | | 4.0 | 3.3 | 3.5 | 3.1 | 2.5 | | | |
| 28 | 2.5 | | 3.8 | 3.3 | 3.4 | 3.1 | 2.4 | | | |
| 29 | 2.4 | | 3.9 | 3.5 | 3.4 | 3.1 | 2.4 | | | |
| 30 | 2.2 | | 3.7 | | 3.4 | 3.1 | 2.4 | | | |
| 31 | 2.1 | | 3.6 | | 3.4 | | 2.5 | | | |

*Daily gage height, in feet, of San Gabriel River near Azusa, Cal., for 1897–1912*—Contd.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | 1909. | | | | | | | |
| 1 | ...... | 4.3 | 4.3 | 4.8 | 4.3 | 3.7 | 3.1 | 16 | 2.5 | 5.2 | 4.2 | 4.6 | 4.1 | 3.4 | 2.9 |
| 2 | ...... | 4.3 | 4.3 | 4.9 | 4.3 | 3.7 | 3.0 | 17 | 2.3 | 5.0 | 4.1 | 4.6 | 4.1 | 3.4 | 2.7 |
| 3 | ...... | 4.3 | 4.3 | 4.9 | 4.3 | 3.6 | 2.9 | 18 | 2.2 | 4.9 | 4.1 | 4.5 | 4.1 | 3.4 | ...... |
| 4 | ...... | 4.3 | 4.3 | 5.0 | 4.3 | 3.6 | 2.9 | 19 | 2.2 | 4.8 | 4.1 | 4.5 | 4.1 | 3.5 | ...... |
| 5 | ...... | 4.3 | 4.3 | 4.9 | 4.3 | 3.6 | 2.9 | 20 | 2.2 | 4.7 | 4.0 | 4.5 | 4.1 | 3.5 | ...... |
| 6 | ...... | 4.3 | 4.3 | 4.8 | 4.2 | 3.6 | 2.9 | 21 | 6.3 | 4.6 | 5.6 | 4.5 | 4.3 | 3.4 | ...... |
| 7 | ...... | 8.0 | 4.3 | 4.8 | 4.2 | 3.6 | 2.9 | 22 | 6.9 | 4.5 | 5.0 | 4.5 | 4.3 | 3.4 | ...... |
| 8 | ...... | 6.5 | 4.3 | 4.7 | 4.2 | 3.6 | 3.1 | 23 | 5.7 | 4.5 | 4.7 | 4.5 | 4.3 | 3.3 | ...... |
| 9 | ...... | 5.3 | 4.3 | 4.7 | 4.2 | 3.5 | 3.1 | 24 | 4.8 | 4.4 | 4.6 | 4.5 | 4.2 | 3.3 | ...... |
| 10 | ...... | 5.0 | 4.3 | 4.7 | 4.2 | 3.5 | 3.0 | 25 | 4.6 | 4.4 | 4.5 | 4.4 | 4.0 | 3.3 | ...... |
| 11 | ...... | 5.4 | 4.2 | 4.6 | 4.2 | 3.4 | 3.0 | 26 | 4.4 | 4.4 | 4.8 | 4.4 | 4.0 | 3.2 | ...... |
| 12 | ...... | 6.0 | 4.2 | 4.6 | 4.2 | 3.4 | 3.0 | 27 | 4.6 | 4.4 | 5.0 | 4.4 | 4.0 | 3.2 | ...... |
| 13 | 2.2 | 6.3 | 4.2 | 4.6 | 4.2 | 3.4 | 2.9 | 28 | 4.5 | 4.4 | 4.9 | 4.4 | 4.0 | 3.2 | ...... |
| 14 | 2.7 | 5.9 | 4.2 | 4.5 | 4.2 | 3.4 | 2.9 | 29 | 4.4 | ...... | 4.9 | 4.4 | 4.0 | 3.2 | ...... |
| 15 | 2.7 | 5.4 | 4.2 | 4.5 | 4.2 | 3.4 | 2.9 | 30 | 4.3 | ...... | 4.8 | 4.3 | 3.9 | 3.2 | ...... |
| | | | | | | | | 31 | 4.3 | ...... | 4.8 | ...... | 3.8 | ...... | ...... |

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–1910. | | | | | | | | 1909–1910. | | | | | | | |
| 1 | ...... | 9.8 | 3.6 | 3.1 | 3.2 | 2.7 | 1.85 | 16 | 3.4 | 4.0 | 3.3 | 3.0 | 3.0 | 2.2 | ...... |
| 2 | ...... | 5.7 | 3.5 | 3.1 | 3.2 | 2.7 | ...... | 17 | 3.3 | 3.9 | 3.3 | 3.0 | 3.0 | 2.2 | ...... |
| 3 | ...... | 5.1 | 3.5 | 3.1 | 3.2 | 2.7 | ...... | 18 | 3.3 | 3.9 | 3.3 | 3.1 | 3.0 | 2.2 | ...... |
| 4 | ...... | 4.8 | 3.5 | 3.1 | 3.2 | 2.7 | ...... | 19 | 3.3 | 3.9 | 3.3 | 3.0 | 3.0 | 2.2 | ...... |
| 5 | ...... | 4.5 | 3.5 | 3.1 | 3.1 | 2.7 | ...... | 20 | 3.3 | 3.9 | 3.3 | 3.0 | 3.0 | 2.2 | ...... |
| 6 | ...... | 4.5 | 3.4 | 3.1 | 3.1 | 2.6 | ...... | 21 | 3.7 | 3.9 | 3.2 | 3.0 | 2.9 | 2.2 | ...... |
| 7 | ...... | 4.5 | 3.4 | 3.1 | 3.1 | 2.6 | ...... | 22 | 3.5 | 3.8 | 3.2 | 3.45 | 2.9 | 2.2 | ...... |
| 8 | ...... | 4.2 | 3.4 | 3.1 | 3.1 | 2.6 | ...... | 23 | 3.6 | 3.8 | 3.2 | 3.2 | 2.9 | 2.1 | ...... |
| 9 | 5.6 | 4.2 | 3.4 | 3.1 | 3.1 | 2.5 | ...... | 24 | 3.5 | 3.8 | 3.2 | 3.2 | 2.9 | 2.1 | ...... |
| 10 | 4.7 | 4.1 | 3.4 | 3.1 | 3.1 | 2.5 | ...... | 25 | 3.4 | 3.7 | 3.2 | 3.1 | 2.9 | 2.1 | ...... |
| 11 | 4.0 | 4.1 | 3.4 | 3.1 | 3.1 | 2.5 | ...... | 26 | 3.4 | 3.7 | 3.2 | 3.1 | 2.9 | 2.1 | ...... |
| 12 | 3.8 | 4.1 | 3.3 | 3.0 | 3.1 | 2.3 | ...... | 27 | 3.4 | 3.7 | 3.1 | 3.1 | 2.9 | 2.1 | ...... |
| 13 | 3.5 | 4.0 | 3.3 | 3.0 | 3.1 | 2.3 | ...... | 28 | 3.3 | 3.7 | 3.1 | 3.3 | 2.9 | 2.1 | ...... |
| 14 | 3.5 | 4.0 | 3.3 | 3.0 | 3.0 | 2.3 | ...... | 29 | 3.3 | 3.6 | ...... | 3.3 | 2.8 | 2.0 | ...... |
| 15 | 3.4 | 4.0 | 3.3 | 3.0 | 3.0 | 2.3 | ...... | 30 | 3.3 | 3.6 | ...... | 3.3 | 2.7 | 2.0 | ...... |
| | | | | | | | | 31 | 7.5 | 3.5 | ...... | 3.3 | ...... | 1.9 | ...... |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | | | |
| 1 | ...... | 5.0 | 3.7 | 4.7 | 4.1 | 3.9 | 3.4 | 2.8 | ...... |
| 2 | ...... | 4.5 | 3.7 | 4.8 | 4.1 | 3.8 | 3.4 | ...... | ...... |
| 3 | ...... | 4.7 | 4.2 | 4.8 | 4.1 | 3.8 | 3.4 | ...... | ...... |
| 4 | ...... | 6.0 | 5.6 | 4.7 | 4.1 | 3.8 | 3.4 | ...... | ...... |
| 5 | ...... | 5.4 | 5.2 | 4.6 | 4.1 | 3.7 | 3.4 | ...... | ...... |
| 6 | ...... | 4.9 | 5.0 | 4.6 | 4.1 | 3.7 | 3.4 | ...... | ...... |
| 7 | ...... | 4.6 | 5.0 | 4.6 | 4.1 | 3.7 | 3.3 | ...... | ...... |
| 8 | ...... | 4.4 | 6.2 | 4.5 | 4.1 | 3.7 | 3.3 | ...... | ...... |
| 9 | ...... | 4.5 | 8.05 | 4.5 | 4.1 | 3.7 | 3.3 | ...... | ...... |
| 10 | 4.5 | 4.3 | 8.6 | 4.4 | 4.1 | 3.6 | 3.3 | ...... | ...... |
| 11 | 3.5 | 4.3 | 6.7 | 4.4 | 4.1 | 3.6 | 3.3 | ...... | ...... |
| 12 | 2.9 | 4.3 | 6.2 | 4.4 | 4.1 | 3.6 | 3.3 | ...... | ...... |
| 13 | 2.5 | 4.3 | 5.6 | 4.4 | 4.0 | 3.6 | 3.3 | ...... | ...... |
| 14 | 2.1 | 4.3 | 5.5 | 4.4 | 4.3 | 3.6 | 3.2 | ...... | ...... |
| 15 | 4.8 | 4.2 | 5.4 | 4.3 | 4.1 | 3.5 | 3.2 | ...... | ...... |
| 16 | 3.9 | 4.1 | 5.4 | 4.3 | 4.1 | 3.5 | 3.2 | ...... | ...... |
| 17 | 3.4 | 4.0 | 5.3 | 4.3 | 4.1 | 3.5 | 3.2 | ...... | ...... |
| 18 | 3.1 | 3.9 | 5.3 | 4.3 | 4.1 | 3.5 | 3.2 | ...... | ...... |
| 19 | 2.9 | 3.8 | 5.3 | 4.3 | 4.0 | 3.5 | 3.2 | ...... | ...... |
| 20 | 2.8 | 3.7 | 5.2 | 4.2 | 4.0 | 3.5 | 3.2 | ...... | ...... |
| 21 | 2.7 | 3.7 | 5.2 | 4.2 | 4.2 | 3.5 | 3.2 | ...... | ...... |
| 22 | 2.6 | 3.6 | 5.1 | 4.2 | 4.0 | 3.5 | 3.2 | ...... | ...... |
| 23 | 2.5 | 3.6 | 5.1 | 4.2 | 4.0 | 3.5 | 3.2 | ...... | ...... |
| 24 | 2.4 | 3.5 | 5.0 | 4.2 | 3.9 | 3.4 | 3.1 | ...... | ...... |
| 25 | 4.5 | 3.5 | 5.0 | 4.2 | 3.9 | 3.4 | 3.1 | ...... | ...... |
| 26 | 4.0 | 3.5 | 4.9 | 4.2 | 3.9 | 3.4 | 3.0 | ...... | ...... |
| 27 | 3.7 | 3.7 | 4.9 | 4.2 | 3.9 | 3.4 | 3.0 | ...... | ...... |
| 28 | 3.6 | 3.7 | 4.8 | 4.2 | 3.9 | 3.4 | 2.9 | ...... | ...... |
| 29 | 7.0 | ...... | 4.8 | 4.1 | 3.9 | 3.4 | 2.9 | ...... | ...... |
| 30 | 5.1 | ...... | 4.7 | 4.1 | 3.9 | 3.4 | 2.9 | ...... | 3.4 |
| 31 | 6.5 | ...... | 4.7 | ...... | 3.9 | ...... | 2.9 | ...... | ...... |

*Daily gage height, in feet, of San Gabriel River near Azusa, Cal., for 1897–1912*—Contd.

| Day. | [illegible] | Jan. | [illegible] | Jan. | [illegible] | Day. | [illegible] | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | 1911–12. | | | | | |
| [illegible] | [illegible] | .... | | [illegible] | [illegible] | 16 | ........ | 4.1 | 4.3 | 3.[illegible] | ...... |
| [illegible] | [illegible] | .... | | [illegible] | [illegible] | 17 | ........ | 4.0 | 4.3 | 3.7 | ...... |
| [illegible] | [illegible] | ...... | [illegible] | [illegible] | 4 | 18 | ........ | 3.9 | 4.3 | 3.7 | .... |
| [illegible] | | ...... | [illegible] | [illegible] | [illegible] | 19 | ........ | 3.9 | 4.3 | 3.7 | ...... |
| | | [illegible] | [illegible] | [illegible] | .4 | 20 | ........ | 3.9 | 4.4 | 3.7 | ...... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .4 | 21 | ........ | 3.8 | 4.3 | 3.7 | .... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .3 | 22 | ........ | 3.8 | 4.3 | 3.[illegible] | ..... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | ........ | 3.7 | 4.3 | 3.[illegible] | ...... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | ........ | 3.7 | 4.3 | 3.[illegible] | .... |
| [illegible] | [illegible] | | [illegible] | [illegible] | .2 | 25 | ........ | 3.7 | 4.3 | 3.[illegible] | ..... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .2 | 26 | ........ | 3.7 | 4.3 | 3.[illegible] | ...... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 27 | ........ | 3.7 | 4.2 | 3.[illegible] | ...... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .3 | 28 | ........ | 3.7 | 4.2 | [illegible] | ...... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ........ | 29 | ........ | 3.7 | 4.1 | [illegible] | .... |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ........ | 30 | ........ | 3.7 | 4.1 | [illegible] | ...... |
| | | | | | | 31 | ........ | 3.6 | ........ | 3.5 | ...... |

NOTE.—River was dry on days for which no gage height is given except Jan. [illegible] and Sept. [illegible], 1911, and Jan. [illegible] and Mar. [illegible], 1912. [illegible] these days the discharge was estimated.

*Rating tables for San Gabriel River near Azusa, Cal.*

**[illegible] to October 10, 1896.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| [illegible] | | [illegible] | [illegible] | [illegible] | 5 | 1.20 | 59 |
| [illegible] | 1 | [illegible] | [illegible] | [illegible] | 11 | 1.30 | 73 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | 1.40 | 84 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 36 | 1.50 | 109 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 46 | 1.60 | 134 |

**October 11 to December 31, 1896.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | 1.40 | 104 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 36 | 1.50 | 126 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 46 | 1.60 | 142 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 59 | 1.70 | 159 |
| [illegible] | [illegible] | [illegible] | 6 | [illegible] | 75 | 1.80 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 94 | | |

**January 1 to December 31, 1897.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | 73 | [illegible] | 214 | [illegible] | 425 | [illegible] | 1,[illegible] |
| [illegible] | [illegible] | [illegible] | 243 | [illegible] | 730 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 275 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1,[illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |

NOTE.—Below gage height [illegible] feet the table for 1897 is the same as the table for Oct. 11 to Dec. 31, 1896.

**January 1, 1898, to December 31, 1898.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | 1.90 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 31 | 2.00 | [illegible] |
| [illegible] | [illegible] | [illegible] | 13 | [illegible] | 38 | | |
| [illegible] | [illegible] | [illegible] | 17 | 1.70 | 45 | | |
| [illegible] | [illegible] | [illegible] | 21 | [illegible] | 53 | | |

*Rating tables for San Gabriel River near Azusa, Cal.*—Continued.

**January 1 to December 31, 1901.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage deight. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.00 | 10 | 2.00 | 80 | 3.00 | 248 | 4.00 | 645 |
| 1.10 | 13 | 2.10 | 92 | 3.10 | 275 | 4.20 | 770 |
| 1.20 | 18 | 2.20 | 103 | 3.20 | 305 | 4.40 | 930 |
| 1.30 | 24 | 2.30 | 115 | 3.30 | 335 | 4.60 | 1,090 |
| 1.40 | 30 | 2.40 | 130 | 3.40 | 370 | 4.80 | 1,260 |
| 1.50 | 37 | 2.50 | 145 | 3.50 | 410 | 5.00 | 1,450 |
| 1.60 | 44 | 2.60 | 160 | 3.60 | 450 | 6.00 | 2,600 |
| 1.70 | 52 | 2.70 | 180 | 3.70 | 495 | | |
| 1.80 | 60 | 2.80 | 200 | 3.80 | 540 | | |
| 1.90 | 70 | 2.90 | 222 | 3.90 | 590 | | |

**January 1 to December 31, 1902.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.80 | 4 | 1.50 | 37 | 2.20 | 128 | 2.90 | 288 |
| .90 | 7 | 1.60 | 44 | 2.30 | 147 | 3.00 | 318 |
| 1.00 | 10 | 1.70 | 52 | 2.40 | 167 | 3.10 | 350 |
| 1.10 | 13 | 1.80 | 63 | 2.50 | 188 | 3.20 | 384 |
| 1.20 | 18 | 1.90 | 77 | 2.60 | 210 | | |
| 1.30 | 24 | 2.00 | 93 | 2.70 | 234 | | |
| 1.40 | 30 | 2.10 | 110 | 2.80 | 260 | | |

**January 1 to March 30, 1903.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.60 | 1 | 1.60 | 45 | 2.60 | 211 | 4.20 | 1,110 |
| .70 | 2 | 1.70 | 54 | 2.70 | 240 | 4.40 | 1,295 |
| .80 | 4 | 1.80 | 65 | 2.80 | 273 | 4.60 | 1,500 |
| .90 | 7 | 1.90 | 78 | 2.90 | 310 | 4.80 | 1,728 |
| 1.00 | 10 | 2.00 | 92 | 3.00 | 350 | 5.00 | 1,980 |
| 1.10 | 13 | 2.10 | 107 | 3.20 | 438 | 5.20 | 2,254 |
| 1.20 | 18 | 2.20 | 125 | 3.40 | 535 | 5.40 | 2,549 |
| 1.30 | 24 | 2.30 | 144 | 3.60 | 652 | 5.60 | 2,855 |
| 1.40 | 30 | 2.40 | 164 | 3.80 | 792 | | |
| 1.50 | 37 | 2.50 | 186 | 4.00 | 945 | | |

**March 31 to December 31, 1903.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.80 | 0 | 1.80 | 44 | 3.60 | 652 | 5.60 | 2,855 |
| .90 | 2 | 1.90 | 55 | 3.80 | 792 | 5.80 | 3,180 |
| 1.00 | 4 | 2.00 | 68 | 4.00 | 945 | 6.00 | 3,525 |
| 1.10 | 6 | 2.20 | 98 | 4.20 | 1,110 | 6.20 | 3,890 |
| 1.20 | 9 | 2.40 | 139 | 4.40 | 1,295 | 6.40 | 4,275 |
| 1.30 | 12 | 2.60 | 190 | 4.60 | 1,500 | 6.60 | 4,683 |
| 1.40 | 16 | 2.80 | 250 | 4.80 | 1,728 | 6.80 | 5,120 |
| 1.50 | 21 | 3.00 | 323 | 5.00 | 1,980 | 7.00 | 5,580 |
| 1.60 | 27 | 3.20 | 417 | 5.20 | 2,254 | 7.50 | 6,900 |
| 1.70 | 35 | 3.40 | 528 | 5.40 | 2,549 | 8.00 | 8,600 |

**January 1, 1904, to February 1, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.60 | 1 | 2.00 | 92 | 3.40 | 535 | 5.60 | 2,855 |
| .70 | 2 | 2.10 | 107 | 3.50 | 590 | 5.80 | 3,180 |
| .80 | 4 | 2.20 | 125 | 3.60 | 652 | 6.00 | 3,525 |
| .90 | 7 | 2.30 | 144 | 3.70 | 720 | 6.20 | 3,890 |
| 1.00 | 10 | 2.40 | 164 | 3.80 | 792 | 6.40 | 4,275 |
| 1.10 | 13 | 2.50 | 186 | 3.90 | 867 | 6.60 | 4,683 |
| 1.20 | 18 | 2.60 | 211 | 4.00 | 945 | 6.80 | 5,120 |
| 1.30 | 24 | 2.70 | 240 | 4.20 | 1,110 | 7.00 | 5,580 |
| 1.40 | 30 | 2.80 | 273 | 4.40 | 1,295 | 7.20 | 6,072 |
| 1.50 | 37 | 2.90 | 310 | 4.60 | 1,500 | 7.40 | 6,610 |
| 1.60 | 45 | 3.00 | 350 | 4.80 | 1,728 | 7.60 | 7,205 |
| 1.70 | 54 | 3.10 | 393 | 5.00 | 1,980 | 7.80 | 7,870 |
| 1.80 | 65 | 3.20 | 438 | 5.20 | 2,254 | 8.00 | 8,600 |
| 1.90 | 78 | 3.30 | 485 | 5.40 | 2,549 | | |

*Rating tables for San Joaquin River near Firebaugh, Cal.—Continued.*

**January 1 to March 11, 1906.**

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| Feet. | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. | Feet. | Sec.-feet. |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 47 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |

NOTE.—The above table is applicable only for open-channel conditions. It is based on discharge measurements made during first part of 1906.

**March 12 to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 10 | [illegible] | 311 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 394 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 441 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 550 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 616 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 113 | [illegible] | 841 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

NOTE.—The above table is applicable only for open-channel conditions. It is based on 11 discharge measurements made during 1906.

**January 1 to December 31, 1906.**

[Indirect method for shifting channels used.]

**January 1 to March 13, 1907.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [illegible] | 1 | [illegible] | 190 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 4 | [illegible] | 225 | [illegible] | 710 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 260 | [illegible] | 760 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 300 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 35 | [illegible] | 340 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 50 | [illegible] | 380 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 420 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 460 | [illegible] | [illegible] | [illegible] | 5,110 |
| [illegible] | 105 | [illegible] | 510 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 560 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 160 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

NOTE.—Table applicable only to open channel. It is based on 13 discharge measurements made during January to March, 1907, and is well defined between gage heights 3 feet and 7.5 feet.

**March 14 to 31, 1907.**

[Indirect method for shifting channels used.]

*Rating tables for San Gabriel River near Azusa, Cal.*—Continued.

**March 27 to December 31, 1907.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 2.00 | 1 | 2.90 | 63 | 3.80 | 241 | 4.70 | 665 |
| 2.10 | 3 | 3.00 | 77 | 3.90 | 270 | 4.80 | 730 |
| 2.20 | 6 | 3.10 | 92 | 4.00 | 302 | 4.90 | 810 |
| 2.30 | 11 | 3.20 | 108 | 4.10 | 336 | 5.00 | 890 |
| 2.40 | 17 | 3.30 | 125 | 4.20 | 374 | 5.20 | 1,050 |
| 2.50 | 24 | 3.40 | 143 | 4.30 | 415 | 5.40 | 1,210 |
| 2.60 | 32 | 3.50 | 163 | 4.40 | 460 | 5.60 | 1,380 |
| 2.70 | 41 | 3.60 | 186 | 4.50 | 515 | 5.80 | 1,560 |
| 2.80 | 51 | 3.70 | 212 | 4.60 | 585 | 6.00 | 1,740 |

NOTE.—Table applicable only to open channel. It is based on 12 discharge measurements made during March to August, 1907, and is fairly well defined between gage heights 2 feet and 6.3 feet.

**January 1 to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.00 | 0 | 3.00 | 56 | 4.00 | 309 | 5.00 | 925 |
| 2.10 | 1 | 3.10 | 71 | 4.10 | 353 | 5.20 | 1,085 |
| 2.20 | 2 | 3.20 | 87 | 4.20 | 401 | 5.40 | 1,245 |
| 2.30 | 4 | 3.30 | 105 | 4.30 | 452 | 5.60 | 1,405 |
| 2.40 | 6 | 3.40 | 126 | 4.40 | 505 | 5.80 | 1,575 |
| 2.50 | 10 | 3.50 | 149 | 4.50 | 560 | 6.00 | 1,745 |
| 2.60 | 16 | 3.60 | 174 | 4.60 | 620 | 6.20 | 1,915 |
| 2.70 | 23 | 3.70 | 202 | 4.70 | 690 | 6.40 | 2,085 |
| 2.80 | 32 | 3.80 | 234 | 4.80 | 765 | | |
| 2.90 | 43 | 3.90 | 270 | 4.90 | 845 | | |

NOTE.—Table applicable only to open channel. It is based on 19 discharge measurements made during 1907 and 1908, and is fairly well defined.

*Daily discharge, in second-feet, of San Gabriel River near Azusa, Cal., for 1894–95, 1898, and 1910–1912.*

| Day. | May. | June. | July. | Aug. | Sept. | Day. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1894. | | | | | | 1894. | | | | | |
| 1 | 34 | 27 | 17 | 11 | 23 | 16 | 45 | 22 | 13 | 13 | 14 |
| 2 | 35 | 27 | 17 | 11 | 21 | 17 | 38 | 24 | 13 | 13 | 14 |
| 3 | 35 | 26 | 15 | 11 | 18 | 18 | 34 | 24 | 11 | 11 | 13 |
| 4 | 35 | 26 | 15 | 10 | 18 | 19 | 32 | 24 | 11 | 14 | 13 |
| 5 | 34 | 25 | 15 | 11 | 18 | 20 | 35 | 24 | 9 | 13 | 13 |
| 6 | 34 | 26 | 16 | 13 | 17 | 21 | 32 | 21 | 9 | 13 | 13 |
| 7 | 33 | 26 | 15 | 14 | 17 | 22 | 32 | 21 | 9 | 13 | 13 |
| 8 | 33 | 26 | 14 | 15 | 15 | 23 | 30 | 21 | 9 | 13 | 13 |
| 9 | 32 | 22 | 14 | 15 | 15 | 24 | 28 | 21 | 10 | 13 | 13 |
| 10 | 31 | 23 | 14 | 15 | 15 | 25 | 27 | 19 | 10 | 14 | 13 |
| 11 | 30 | 22 | 14 | 14 | 14 | 26 | 27 | 19 | 10 | 17 | 13 |
| 12 | 30 | 23 | 14 | 15 | 15 | 27 | 27 | 18 | 9 | 15 | 13 |
| 13 | 30 | 24 | 14 | 14 | 16 | 28 | 27 | 18 | 9 | 15 | 13 |
| 14 | 31 | 24 | 13 | 14 | 15 | 29 | 27 | 18 | 9 | 27 | 14 |
| 15 | 50 | 22 | 13 | 14 | 14 | 30 | 27 | 17 | 10 | 21 | 16 |
| | | | | | | 31 | 27 | | 11 | 22 | |

Daily discharge, in second-feet, of [illegible] River near [illegible], Cal., for [illegible] and 311—312—Continued.

[illegible]

a River was dry on all other days during [illegible].

*Daily discharge, in second-feet, of San Gabriel River near Azusa, Cal., for 1894–95, 1898, and 1910–1912*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | Day. | Jan. | Feb. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | | | 1910. | | | | | |
| 1 | 12,400 | 253 | 78 | 96 | 30 | 16 | 541 | 119 | 63 | 63 | 4.5 |
| 2 | 3,090 | 200 | 78 | 96 | 30 | 17 | 455 | 119 | 63 | 63 | 4.5 |
| 3 | 1,850 | 200 | 78 | 96 | 30 | 18 | 455 | 119 | 78 | 63 | 4.5 |
| 4 | 1,440 | 200 | 78 | 96 | 30 | 19 | 455 | 119 | 63 | 63 | 4.5 |
| 5 | 1,070 | 200 | 78 | 78 | 30 | 20 | 455 | 119 | 63 | 63 | 4.5 |
| 6 | 1,070 | 153 | 78 | 78 | 22 | 21 | 455 | 96 | 63 | 50 | 4.5 |
| 7 | 1,070 | 153 | 78 | 78 | 22 | 22 | 379 | 96 | 176 | 50 | 4.5 |
| 8 | 733 | 153 | 78 | 78 | 22 | 23 | 379 | 96 | 96 | 50 | 2.5 |
| 9 | 733 | 153 | 78 | 78 | 16 | 24 | 379 | 96 | 96 | 50 | 2.5 |
| 10 | 634 | 153 | 78 | 78 | 16 | 25 | 312 | 96 | 78 | 50 | 2.5 |
| 11 | 634 | 153 | 78 | 78 | 16 | 26 | 312 | 96 | 78 | 50 | 2.5 |
| 12 | 634 | 119 | 63 | 78 | 7 | 27 | 312 | 78 | 78 | 50 | 2.5 |
| 13 | 541 | 119 | 63 | 78 | 7 | 28 | 312 | 78 | 119 | 50 | 2.5 |
| 14 | 541 | 119 | 63 | 63 | 7 | 29 | 263 | ........ | 119 | 39 | 1 |
| 15 | 541 | 119 | 63 | 63 | 7 | 30 | 253 | ........ | 119 | 30 | 1 |
| | | | | | | 31 | 200 | ........ | 119 | ........ | 0.5 |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | | |
| 1 | ........ | 1,540 | 285 | 580 | 246 | 128 | 26 | ........ |
| 2 | ........ | 900 | 235 | 680 | 245 | 98 | 26 | ........ |
| 3 | ........ | 1,140 | 585 | 690 | 243 | 98 | 28 | ........ |
| 4 | ........ | 3,180 | 2,470 | 590 | 241 | 98 | 26 | ........ |
| 5 | ........ | 2,140 | 1,830 | 500 | 239 | 76 | 28 | ........ |
| 6 | ........ | 1,400 | 1,540 | 510 | 238 | 76 | 28 | ........ |
| 7 | ........ | 1,020 | 1,540 | 520 | 236 | 76 | 19 | ........ |
| 8 | ........ | 785 | 3,560 | 430 | 234 | 76 | 19 | ........ |
| 9 | 100 | 900 | 7,660 | 440 | 232 | 76 | 19 | ........ |
| 10 | 1,070 | 680 | 9,100 | 360 | 231 | 57 | 19 | ........ |
| 11 | 200 | 680 | 4,500 | 370 | 229 | 57 | 19 | ........ |
| 12 | 50 | 680 | 3,430 | 375 | 227 | 57 | 19 | ........ |
| 13 | 16 | 680 | 2,300 | 380 | 175 | 57 | 19 | ........ |
| 14 | 2 | 680 | 2,060 | 390 | 200 | 57 | 12 | ........ |
| 15 | 1,440 | 585 | 1,820 | 310 | 218 | 41 | 12 | ........ |
| 16 | 455 | 500 | 1,780 | 320 | 217 | 41 | 12 | ........ |
| 17 | 153 | 420 | 1,570 | 325 | 217 | 41 | 12 | ........ |
| 18 | 78 | 350 | 1,520 | 350 | 217 | 41 | 12 | ........ |
| 19 | 50 | 290 | 1,470 | 375 | 168 | 41 | 12 | ........ |
| 20 | 39 | 235 | 1,270 | 325 | 168 | 41 | 12 | ........ |
| 21 | 30 | 235 | 1,200 | 350 | 280 | 41 | 12 | ........ |
| 22 | 22 | 185 | 1,020 | 345 | 168 | 41 | 12 | ........ |
| 23 | 16 | 185 | 963 | 345 | 168 | 41 | 12 | ........ |
| 24 | 11 | 140 | 840 | 340 | 128 | 28 | 7 | ........ |
| 25 | 1,070 | 140 | 850 | 340 | 128 | 28 | 7 | ........ |
| 26 | 541 | 140 | 730 | 335 | 128 | 28 | 3 | ........ |
| 27 | 312 | 235 | 740 | 335 | 128 | 28 | 3 | ........ |
| 28 | 253 | 235 | 640 | 330 | 128 | 28 | 1 | ........ |
| 29 | 5,190 | ........ | 650 | 250 | 128 | 28 | 1 | 50 |
| 30 | 1,680 | ........ | 560 | 248 | 128 | 28 | 1 | 28 |
| 31 | 4,150 | ........ | 570 | ........ | 128 | ........ | 1 | ........ |

*Daily discharge, in second-feet, of San Gabriel River near Azusa, Cal., for 1894–95, 1896, and 1910–1912—Continued.*

| Day. | Oct. | Jan. | Mar. | Apr. | May | June | Day. | Oct. | Jan. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | 1911–12. | | | | | | |
| 1 | | | | 46 | 217 | 41 | 16 | | | 230 | 230 | 96 | |
| 2 | | | | 46 | 217 | 41 | 17 | | | 230 | 230 | 76 | |
| 3 | | | | 46 | 168 | 38 | 18 | | | 186 | 325 | 76 | |
| 4 | | | 100 | 46 | 146 | 38 | 19 | | | 206 | 324 | 76 | |
| 5 | | | 300 | 46 | 128 | 35 | 20 | | | 165 | 440 | 76 | |
| 6 | | | 1,170 | 46 | 128 | 35 | 21 | | | 95 | 355 | 76 | |
| 7 | | | 521 | 40 | 128 | 19 | 22 | | | 95 | 355 | 57 | |
| 8 | | | 49 | 40 | 217 | 19 | 23 | | | 70 | 355 | 57 | |
| 9 | | | 70 | 170 | 168 | 19 | 24 | | | 70 | 355 | 57 | |
| 10 | | | 2,160 | 170 | 128 | 12 | 25 | | | 70 | 355 | 57 | |
| 11 | | | 750 | 650 | 128 | 12 | 26 | | | 65 | 355 | 57 | |
| 12 | | | 360 | 415 | 128 | 12 | 27 | | | 65 | 290 | 41 | |
| 13 | | | 490 | 346 | 128 | 3 | 28 | | | 65 | 280 | 41 | |
| 14 | | 67 | 180 | 330 | 38 | | 29 | | | 65 | 217 | 41 | |
| 15 | | | 180 | 320 | 38 | | 30 | | | 60 | 217 | 41 | |
| | | | | | | | 31 | | | 45 | | 41 | |

NOTE.—Daily discharge for 1910–12 determined from fairly well defined rating curves applicable as follows: Jan. 1, 1910, to Jan. 29, 1911; Jan. 30 to Mar. 10, 1911, and May 16 to Dec. 31, 1911; Mar. 11 to May 15, 1911, determined by the indirect method for shifting channels. River dry on days for which no discharge is given. Discharge estimated Sept. 29, 1911, Jan. 14, 1912, and Mar. 4, 1912. Mar. 5 to Apr. 20, 1912, determined by the indirect method for shifting channels. Apr. 21 to June 13, 1912, fairly well defined.

*Monthly discharge of San Gabriel River near Azusa, Cal., for 1896–1902 and 1910–1912.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| **1896.** | | | | | |
| January | 35 | 6 | 11 | 676 | |
| February | 23 | 3 | 12 | 690 | |
| March | 134 | 27 | 75 | 4,612 | |
| April | 46 | 6 | 11 | 655 | |
| May | 0 | 0 | 0 | 0 | |
| June | 0 | 0 | 0 | 0 | |
| July | 0 | 0 | 0 | 0 | |
| August | 0 | 0 | 0 | 0 | |
| September | 0 | 0 | 0 | 0 | |
| The period | | | | 6,630 | |
| **1896–97.** | | | | | |
| October | 177 | 0 | 12 | 738 | |
| November | 16 | 0 | 3 | 179 | |
| December | 12 | 0 | 2 | 123 | |
| January | 130 | 5 | 40 | 2,494 | |
| February | 1,710 | 46 | 332 | 18,420 | |
| March | 1,765 | 273 | 448 | 27,572 | |
| April | 345 | 141 | 259 | 15,417 | |
| May | 141 | 28 | 82 | 5,042 | |
| June | 28 | .2 | 5 | 274 | |
| July | 0 | .0 | 0 | 0 | |
| August | 0 | .0 | 0 | 0 | |
| September | 0 | .0 | 0 | 0 | |
| The year | 1,765 | .0 | 98.6 | 70,200 | |
| **1897–98.** | | | | | |
| October | 1,600 | 0.0 | 72 | 4,458 | |
| November | 15 | .4 | 8 | 475 | |
| December | 5 | 3.0 | 4 | 221 | |
| January | 31 | 0 | 14 | 863 | |
| February | 41 | 0 | 11 | 622 | |
| March | 1 | 0 | .03 | 2 | |
| April | 0 | 0 | 0 | 0 | |
| May | 68 | 0 | 4.5 | 277 | |
| June | 0 | 0 | 0 | 0 | |
| July | 0 | 0 | 0 | 0 | |
| August | 0 | 0 | 0 | 0 | |
| September | 0 | 0 | 0 | 0 | |
| The year | 1,600 | 0.0 | 9.46 | 6,920 | |

*Monthly discharge of San Gabriel River near Azusa, Cal., for 1896–1902, and 1910–1912*—Continued.

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| **1898–99.** | | | | | |
| October | 0 | 0 | 0 | 0 | |
| November | 0 | 0 | 0 | 0 | |
| December | 0 | 0 | 0 | 0 | |
| January | 16 | 0 | 1.2 | 123 | |
| February | 0 | 0 | 0 | 0 | |
| March | 0 | 0 | 0 | 0 | |
| April | 0 | 0 | 0 | 0 | |
| May | 0 | 0 | 0 | 0 | |
| June | 0 | 0 | 0 | 0 | |
| July | 0 | 0 | 0 | 0 | |
| August | 0 | 0 | 0 | 0 | |
| September | 0 | 0 | 0 | 0 | |
| The year | 16 | 0 | .1 | 123 | |
| **1899–1900.** | | | | | |
| October | 13 | 0 | .42 | 26 | |
| November | 0 | 0 | 0 | 0 | |
| December | 0 | 0 | 0 | 0 | |
| January | 49 | 0 | 2 | 123 | |
| February | 0 | 0 | 0 | 0 | |
| March | 0 | 0 | 0 | 0 | |
| April | 0 | 0 | 0 | 0 | |
| May | 38 | 0 | 2 | 123 | |
| June | 0 | 0 | 0 | 0 | |
| July | 0 | 0 | 0 | 0 | |
| August | 0 | 0 | 0 | 0 | |
| September | 0 | 0 | 0 | 0 | |
| The year | 49 | 0 | .37 | 272 | |
| **1900–1901.** | | | | | |
| October | 0 | 0 | 0 | 0 | |
| November | 5,168 | 0 | 172 | 10,235 | |
| December | 0 | 0 | 0 | 0 | |
| January | 1,450 | 0 | 11[illegible] | 6,825 | |
| February | 2,600 | 70 | 613 | 34,044 | |
| March | 370 | 60 | 158 | 9,71[illegible] | |
| April | 75 | 13 | 43 | 2,559 | |
| May | 200 | 18 | 55 | 3,382 | |
| June | 27 | 0 | 7 | 4[illegible] | |
| July | 0 | 0 | 0 | 0 | |
| August | 0 | 0 | 0 | 0 | |
| September | 0 | 0 | 0 | 0 | |
| The year | 5,168 | 0 | 96.6 | 67,200 | |
| **1901–2.** | | | | | |
| October | 70 | 0 | 3 | 184 | |
| November | 0 | 0 | 0 | 0 | |
| December | 0 | 0 | 0 | 0 | |
| January | 0 | 0 | 0 | 0 | |
| February | 57 | 0 | 3 | 16[illegible] | |
| March | 318 | 4 | 38 | 2,3[illegible] | |
| April | 37 | 0 | 7 | 417 | |
| May | 0 | 0 | 0 | 0 | |
| June | 0 | 0 | 0 | 0 | |
| July | 0 | 0 | 0 | 0 | |
| August | 0 | 0 | 0 | 0 | |
| September | 0 | 0 | 0 | 0 | |
| The year | 318 | 0 | 4.2 | 5,10[illegible] | |
| **1902.** | | | | | |
| October | 0 | 0 | 0 | 0 | |
| November | 0 | 0 | 0 | 0 | |
| December | 0 | 0 | 0 | 0 | |
| **1910.** | | | | | |
| January | 12,400 | 200 | 1,060 | 65,200 | C |
| February | 255 | 78 | 13[illegible] | 7,50[illegible] | B |
| March | 176 | 63 | [illegible] | 5,12[illegible] | B |
| April | 96 | 30 | 6[illegible] | 3,96[illegible] | B |
| May | 30 | 5 | 11.0 | 67[illegible] | B |
| June | 0 | 0 | 0 | 0 | |
| July | 0 | 0 | 0 | 0 | |
| August | 0 | 0 | 0 | 0 | |
| September | 0 | 0 | 0 | 0 | |
| The period | | | | 82,50[illegible] | |

*Monthly discharge of San Gabriel River near Azusa, Cal., for 1896–1902, and 1910–1912*—Continued.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1910-11.** | | | | | |
| October | 0 | 0 | 0 | 0 | |
| November | 0 | 0 | 0 | 0 | |
| December | 0 | 0 | 0 | 0 | |
| January | 5,190 | 0 | 546 | 33,600 | C. |
| February | 3,180 | 140 | 724 | 40,200 | B. |
| March | 9,100 | 235 | 1,910 | 117,000 | C. |
| April | 690 | 248 | 401 | 23,900 | B. |
| May | 360 | 128 | 201 | 12,400 | B. |
| June | 128 | 28 | 55.1 | 3,280 | C. |
| July | 28 | 1 | 14.4 | 885 | D. |
| August | 0 | 0 | 0 | 0 | |
| September | 50 | 0 | 2.6 | 155 | D. |
| The year | 9,100 | 0 | 321 | 231,000 | |
| **1911-12.** | | | | | |
| October | 7 | 0 | .2 | 12 | D. |
| November | 0 | 0 | .0 | 0 | |
| December | 0 | 0 | .0 | 0 | |
| January | 47 | 0 | 1.5 | 92 | D. |
| February | 0 | 0 | .0 | 0 | |
| March | 2,950 | 0 | 304 | 18,700 | B. |
| April | 650 | 40 | 249 | 14,800 | B. |
| May | 217 | 41 | 104 | 6,400 | B. |
| June | 41 | 0 | 9.7 | 577 | C. |
| The period | | | | 40,600 | |

*Daily discharge, in second-feet, of the San Gabriel canals near Azusa, Cal., for 1898–1906.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1898.** | | | | | | | | | |
| 1 | 28 | 28 | 33 | 36.5 | 26 | 30 | 14.5 | 9.5 | 8.2 |
| 2 | 28 | 28 | 32 | 37 | 39 | 28 | 13 | 9.5 | 10 |
| 3 | 28 | 28 | 31 | 37 | 37 | 25 | 13.5 | 9.5 | 8.2 |
| 4 | 28 | 28 | 31 | 37 | 36 | 23.5 | 13 | 9 | 8.2 |
| 5 | 27 | 32 | 31 | 37.5 | 34 | 22.8 | 13 | 9 | 8.2 |
| 6 | 27 | 32 | 31 | 36.5 | 31.5 | 21 | 12 | 9 | 8.2 |
| 7 | 27 | 32 | 30 | 36 | 32 | 20.2 | 14 | 8.5 | 7.9 |
| 8 | 27 | 29 | 30 | 35 | 31 | 20 | 12.5 | 8.5 | 7.9 |
| 9 | 32 | 29 | 28 | 35 | 30 | 20 | 11.5 | 8.5 | 8 |
| 10 | 32 | 29 | 34 | 35 | 28 | 21.5 | 11.5 | 8.4 | 8 |
| 11 | 31 | 29 | 34 | 34 | 25 | 23.5 | 11 | 8.5 | 7.5 |
| 12 | 25 | 32 | 32.5 | 32.5 | 25 | 22 | 11 | 8.5 | 7.5 |
| 13 | 25 | 32 | 34 | 32.5 | 25 | 21.4 | 10 | 8.4 | 7.5 |
| 14 | 25 | 32 | 33.5 | 32.5 | 26.5 | 21 | 10 | 6.5 | 7.5 |
| 15 | 25 | 32 | 33.5 | 34 | 20 | 20.2 | 9.7 | 7 | 7 |
| 16 | 25 | 10 | 36 | 34 | 27.5 | 18 | 10 | 7 | 7 |
| 17 | 25 | 10 | 36 | 34 | 45.5 | 17.5 | 9.7 | 7 | 6.7 |
| 18 | 25 | 29 | 37 | 34 | 40 | 16.2 | 10 | 7 | 6.5 |
| 19 | 25 | 29 | 37 | 33 | 38.5 | 15.2 | 10 | 5 | 6.5 |
| 20 | 25 | 29 | 37 | 33 | 33.5 | 17 | 10 | 5.5 | 6.1 |
| 21 | 25 | 29 | 37 | 32 | 37 | 16 | 11.5 | 6 | 7.5 |
| 22 | 24 | 29 | 36 | 30 | 36 | 17 | 11.5 | 6 | 7.5 |
| 23 | 24 | 29 | 34 | 29 | 35 | 17.3 | 11.5 | 6 | 7.5 |
| 24 | 23 | 34 | 34 | 27 | 32.5 | 17 | 9.5 | 6 | 7.5 |
| 25 | 23 | 34 | 34 | 26 | 30.5 | 16 | 9.5 | 5.5 | 6.5 |
| 26 | 23 | 34 | 48 | 25.3 | 30 | 16 | 9 | 5.5 | 8.5 |
| 27 | 23 | 34 | 41 | 25.3 | 30 | 16 | 9 | 6.3 | 7.5 |
| 28 | 23 | 34 | 39 | 27 | 30.5 | 15.8 | 9 | 7.5 | 10.2 |
| 29 | 23 | ........ | 36 | 30 | 29.5 | 15 | 9.5 | 7 | 8 |
| 30 | 23 | ........ | 36 | 35.5 | 30.5 | 14.5 | 9.5 | 7 | 10.2 |
| 31 | 23 | ........ | 37 | ........ | 30 | ........ | 9.5 | 7 | ........ |

*Daily discharge, in second-feet, of the San Gabriel canals near Azusa, Cal., for 1898–1906—* Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1898–99. | | | | | | | | | | | | |
| 1 | 9 | 9 | 11.7 | 14.8 | 27.2 | 20.3 | 28 | 17.5 | 22.2 | 4 | 5 | 3.4 |
| 2 | 9.8 | 8.5 | 11.8 | 24.2 | 28 | 20.3 | 27.5 | 17.5 | 20 | 4 | 5.1 | 3 |
| 3 | 10 | 8.5 | 11.8 | 20.3 | 26.2 | 21.5 | 25.2 | 17 | 17 | 4 | 5.5 | 4 |
| 4 | 10.5 | 8 | 11.9 | 19 | 24.2 | 19.4 | 24.8 | 17 | 15 | 4 | 5.5 | 4.3 |
| 5 | 9 | 8.5 | 11.9 | 19 | 23.5 | 18.7 | 24.8 | 15.5 | 14.8 | 4 | 6 | 3.7 |
| 6 | 9 | 9 | 11.9 | 18 | 23.5 | 18.5 | 25 | 17.5 | 13.5 | 4.2 | 6 | 4.3 |
| 7 | 8.5 | 9 | 12 | 18 | 23.5 | 18 | 24 | 17.5 | 12 | 4.2 | 5 | 3.7 |
| 8 | 8.5 | 9 | 12 | 18 | 23.5 | 18.5 | 22.2 | 16.5 | 11 | 3.5 | 4.7 | 4.5 |
| 9 | 8.5 | 8.5 | 12 | 18 | 23.4 | 18.7 | 22 | 15.5 | 9.7 | 3.4 | 4.7 | 5.5 |
| 10 | 9 | 8.7 | 12.2 | 22 | 23.4 | 18.7 | 23.5 | 14 | 8.5 | 3.4 | 4.5 | 5 |
| 11 | 8.7 | 9 | 12.5 | 23 | 23.4 | 19 | 23.5 | 13 | 8.8 | 3.5 | 4.7 | 4 |
| 12 | 8 | 9.8 | 12.6 | 23 | 23.4 | 19 | 22.2 | 13 | 9 | 3.4 | 4.5 | 4 |
| 13 | 8 | 9.8 | 12.6 | 22 | 23 | 19 | 21 | 12.5 | 9.5 | 3 | 4.5 | 3.6 |
| 14 | 7.5 | 9.2 | 12.6 | 22 | 21.8 | 19 | 21 | 12 | 9.2 | 3.4 | 4.3 | 3.8 |
| 15 | 7.5 | 9.8 | 13.2 | 22 | 21.6 | 19 | 20.5 | 12.5 | 8 | 3.5 | 4 | 4.2 |
| 16 | 7.5 | 9.8 | 15.2 | 22 | 20.3 | 31.2 | 20 | 14.1 | 7.8 | 3.5 | 4 | 4 |
| 17 | 8 | 9.8 | 15 | 18 | 20 | 36.4 | 19.7 | 13 | 7.5 | 3.3 | 4.5 | 3.7 |
| 18 | 8 | 9 | 15 | 18 | 20 | 35 | 19.5 | 13 | 7.5 | 3 | 6 | 3.7 |
| 19 | 8.4 | 10.1 | 14.4 | 19.7 | 19.7 | 29 | 19.5 | 13.5 | 7.3 | 3 | 6 | 3.7 |
| 20 | 8.6 | 10.5 | 14.5 | 19.3 | 19.7 | 29.5 | 18.5 | 11.5 | 7 | 3 | 6 | 3.7 |
| 21 | 7.9 | 10.5 | 14.5 | 20.4 | 19.7 | 37.4 | 17 | 11.5 | 7 | 3 | 5.5 | 3.3 |
| 22 | 8.2 | 10.5 | 14.5 | 21.6 | 19.7 | 32.7 | 16.5 | 11.5 | 6.2 | 3.3 | 5.5 | 3.3 |
| 23 | 9 | 11.2 | 14.5 | 22.8 | 20.3 | 31.7 | 16.2 | 11.5 | 6.2 | 3.5 | 5 | 3.3 |
| 24 | 10 | 11.2 | 14.5 | 23.6 | 22.4 | 32.5 | 17.5 | 12 | 6.2 | 3.5 | 4 | 3 |
| 25 | 9 | 10.5 | 14.8 | 24 | 21.8 | 35.5 | 19.3 | 12 | 6.2 | 3.5 | 4 | 3 |
| 26 | 9.1 | 10.5 | 14 | 24 | 21.2 | 35.4 | 21 | 12 | 6.2 | 4 | 4 | 3 |
| 27 | 9.1 | 10.5 | 14 | 24.1 | 21.2 | 32 | 21.3 | 11.5 | 6 | 4 | 4 | 3.3 |
| 28 | 8.9 | 11 | 14 | 23.5 | 21 | 32 | 20.5 | 11.5 | 5.5 | 4 | 5.5 | 3.3 |
| 29 | 8.9 | 11.5 | 14.3 | 23.2 | ....... | 31.6 | 18 | 12.7 | 5.5 | 4 | 4 | 3.3 |
| 30 | 8.4 | 11.5 | 14 | 24.2 | ....... | 30 | 17.5 | 12 | 4.9 | 4 | 4 | 3.7 |
| 31 | 8.4 | ....... | 14.5 | 26.2 | ....... | 29.5 | ....... | 13.5 | ....... | 4 | 4 | ....... |
| 1899–1900. | | | | | | | | | | | | |
| 1 | 3.7 | 12 | 16.2 | [a]22 | [a]22.8 | 17 | 15.5 | 17 | 21 | 9.9 | 3.5 | 4.5 |
| 2 | 4 | 11.5 | 16 | [a]22 | [a]22.7 | 17 | 16 | 17 | 21.5 | 10.1 | 3.5 | 4.7 |
| 3 | 4 | 11.5 | 16 | 40 | [a]22.6 | [a]17.5 | 17 | 16.2 | 19.4 | 9.6 | 3.5 | 5.2 |
| 4 | 4 | 11.7 | 16 | 50 | 22.5 | [a]27.5 | 16 | 25 | [a]18.5 | 8.4 | 3.5 | 5 |
| 5 | 4 | 10.1 | 16.3 | [a]50 | 23 | [a]30 | 16 | [a]48 | 18 | 8.9 | 4.4 | 4.6 |
| 6 | 4 | 10.2 | 16 | [a]40 | [a]22.5 | [a]24.5 | 15.5 | 54 | 17.5 | 7.8 | 4.6 | 4.3 |
| 7 | 4.3 | 10.2 | 16 | 40 | [a]22.2 | 23 | 20 | [a]54 | [a]17.5 | 7.4 | 4.4 | 4.1 |
| 8 | 3.7 | 10.2 | 15.7 | [a]38 | 21.8 | [a]22 | 17.6 | [a]49 | [a]17.5 | 7.6 | 4.3 | 4 |
| 9 | 3.7 | 10.3 | 15.5 | [a]34 | 21.5 | 21 | 16.3 | [a]43 | ....... | 7.2 | 4.5 | 4.2 |
| 10 | 4.4 | 12 | 15.5 | [a]31 | 20.8 | 20 | 16.1 | [a]43 | 17.1 | 6.6 | 4.7 | 4.3 |
| 11 | 5.5 | 12 | 15.5 | 32 | 20.6 | 20 | 15 | [a]56 | 17.5 | 6.2 | 4 | 4.5 |
| 12 | 9 | 12 | 15.5 | [a]31 | 20.5 | 19.5 | [a]14.6 | 56 | 17.1 | 5.6 | 4.6 | 4.5 |
| 13 | 22 | 12 | 15.5 | [a]30 | 20.4 | 19.3 | [a]15 | 52 | 18.1 | 5.1 | 4.3 | 4.6 |
| 14 | 22 | 14.5 | 15.5 | 30 | 20.4 | 20 | [a]15 | 47 | 17.5 | 5.1 | 4.5 | 4.8 |
| 15 | 26 | 15 | 16 | [a]29.2 | 20.3 | 18 | [a]14.6 | 41.6 | 16 | 7.2 | 4.1 | 4.5 |
| 16 | 19 | 15 | 23 | [a]28.5 | 20.3 | 18 | [a]13.5 | 40.3 | 15.4 | 5.9 | 3.9 | 4.1 |
| 17 | 16 | 15 | 39 | [a]28 | 19.5 | 18 | [a]13.5 | 39 | 14.3 | 5.6 | 3.7 | 3.7 |
| 18 | 15 | 14 | 30 | 27.5 | 19 | 17.6 | [a]13 | [a]38.5 | 13.7 | 5.3 | 4.3 | 3.5 |
| 19 | 13.5 | 14 | 28 | [a]27 | 19 | 18.4 | [a]13 | [a]36.5 | 12.3 | 5.3 | 4.6 | 3.3 |
| 20 | 13.5 | 14 | 25 | [a]26.5 | 19 | 18.2 | [a]14 | [a]31 | 11.5 | 5.9 | 4.5 | 3.4 |
| 21 | 13 | 16 | 23 | 26 | 18.7 | 18.1 | [a]26 | [a]30.5 | 11.7 | 5.4 | 4 | 3.3 |
| 22 | 13.5 | 23.5 | 22.5 | [a]25.4 | 18.7 | 18 | [a]22 | [a]29 | 10.9 | 5.4 | 3.6 | 3.1 |
| 23 | 14 | 20 | 21.5 | [a]24.8 | 17.5 | 25 | [a]19 | [a]30.5 | 10.1 | 4.8 | 3.6 | 3.8 |
| 24 | 14 | 18.3 | 20.7 | [a]24.2 | 18 | 23 | 18.5 | [a]29.5 | 11 | 4.6 | 3.6 | 5.2 |
| 25 | 12.5 | 18 | 20.7 | 24.5 | 18 | 20 | 18.5 | [a]27 | 10.8 | 4.3 | 3.6 | 5.7 |
| 26 | 12 | 17.2 | 20.7 | [a]24.4 | 18 | 20 | 19.7 | [a]24 | 10.1 | 4.3 | 3.6 | 5.2 |
| 27 | 12 | 17 | 20.7 | [a]24.3 | 18 | 19.5 | 21 | [a]23.5 | 9.6 | 4.6 | 3.7 | 4.7 |
| 28 | 12.3 | 17 | 21 | 24.2 | 17.5 | 17.5 | 21.5 | [a]22.5 | 9.6 | 4.2 | 3.6 | 4.3 |
| 29 | 11.5 | 16.7 | 23 | [a]23.8 | ....... | 17 | 20.6 | [a]22 | 9.1 | 4.9 | 3.5 | 4.2 |
| 30 | 13 | 16.3 | 23 | 23.4 | ....... | 15.5 | 18.5 | [a]21 | 8.8 | 4.5 | 3.9 | 3.9 |
| 31 | 12.3 | ....... | 22 | 23 | ....... | 15.5 | ....... | [a]19.5 | ....... | 4.1 | 4.3 | ....... |

[a] Estimated.

*Daily discharge, in second-feet, of the San Gabriel canals near Azusa, Cal., for 1898–1906*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1900-1901.** | | | | | | | | | | | | |
| 1 | 3.7 | 5.3 | 52.6 | 28 | 67 | 70 | 55 | 72 | 66 | 41 | 23.5 | 15 |
| 2 | 4.2 | 5.5 | 49.6 | 28 | 67 | 70 | 55 | 72 | 66 | 41 | 24.2 | 15 |
| 3 | 4.7 | 5.5 | 48.7 | 28 | 67 | 70 | 56 | 59 | 66 | 41 | 25 | 15.7 |
| 4 | 4.8 | 5.5 | 46.2 | 28 | 67 | 70 | 55 | 59 | 63 | 40 | 25 | 19 |
| 5 | 4.9 | 5.6 | 44.3 | 28 | 5 | 70 | 55 | 59 | 63 | 38 | 26.8 | 15.8 |
| 6 | 4.9 | 5.8 | 42.9 | ...... | 70 | 70 | 68 | 59 | 63 | 36 | 24 | 19.2 |
| 7 | 4.5 | 5.8 | 43.5 | ...... | 70 | 70 | 60 | 59 | 63 | 34 | 23.4 | 19 |
| 8 | 4.3 | 5.8 | 42.3 | 35 | 70 | 69 | 56 | 67 | 63 | 33 | 23 | 17.9 |
| 9 | 4 | 5.8 | 35.6 | 90 | 70 | 69 | 56 | 67 | 63 | 33 | 22 | 17.3 |
| 10 | 4 | 5.9 | 35.6 | 78 | 70 | 69 | 56 | 67 | 63 | 22.5 | 21 | 17.2 |
| 11 | 4.4 | 5.5 | 34.5 | 71 | 70 | 69 | 56 | 68 | 63 | 32 | 20 | 16.8 |
| 12 | 4.7 | 5.7 | 31.4 | 70 | 70 | 69 | 56 | 68 | 62 | 32 | 20 | 16.6 |
| 13 | 5.6 | 5.7 | 32.6 | 69 | 70 | 69 | 56 | 68 | 62 | 31.5 | 21 | 16.4 |
| 14 | 6.4 | 5.9 | 32.9 | 69 | 70 | 69 | 59 | 68 | 60 | 30 | 19.5 | 16.4 |
| 15 | 5.8 | 6.2 | 32.3 | 68 | 70 | 69 | 63 | 68 | 60 | 30 | 19.5 | 15.9 |
| 16 | 5.3 | 7.1 | 32.4 | 68 | 70 | 69 | 63 | 68 | 60 | 30 | 19.5 | 16 |
| 17 | 5.2 | 13.4 | ...... | 67 | 70 | 68 | 70 | 68 | 55 | 29 | 19 | 15.7 |
| 18 | 5.5 | 15.6 | ...... | 66 | 70 | 68 | 70 | 68 | 54.5 | 28 | 21 | 15.8 |
| 19 | 5.6 | 13.2 | ...... | 66 | 70 | 68 | 70 | 68 | 54 | 27 | 19.3 | 15.6 |
| 20 | 6 | 16.7 | ...... | 66 | 70 | 68 | 70 | 65 | 53.5 | 28 | 19 | 15.7 |
| 21 | 5.7 | [a] 31.8 | ...... | 77 | 70 | 35 | 71.5 | 65 | 50 | 29 | 19 | 16.5 |
| 22 | 5.5 | ...... | ...... | 73 | 70 | 57 | 71.5 | 65 | 49.5 | 27 | 18.5 | 15.6 |
| 23 | 5.5 | ...... | ...... | 70 | 70 | 57 | 82 | 65 | 49.5 | 26 | 18 | 19.6 |
| 24 | 5.8 | ...... | ...... | 69 | 70 | 57 | 82 | 66 | 49.5 | 25 | 17 | 20.4 |
| 25 | 5.8 | ...... | ...... | 68 | 70 | 57 | 82 | 66 | 52 | 24.7 | 15.7 | 19.1 |
| 26 | 5.8 | ...... | ...... | 68 | 70 | 57 | 82 | 66 | 48.5 | 24.2 | 15 | 17.6 |
| 27 | 5.3 | ...... | ...... | 68 | 70 | 57 | 82 | 66 | 46.5 | 24.2 | 15 | 17.5 |
| 28 | 5.8 | 45.2 | ...... | 71 | 70 | 39 | 82 | 66 | 43.5 | 24.2 | 15 | 17.3 |
| 29 | 6.2 | 48 | ...... | 70 | ...... | 39 | 82 | 66 | 41 | 24.2 | 15 | 18.7 |
| 30 | 5.7 | 54.8 | ...... | 67 | ...... | 55 | 84 | 66 | 41 | 25 | 15 | 20.4 |
| 31 | 5.7 | ...... | ...... | 67 | ...... | 55 | ...... | 66 | ...... | 24.2 | 15 | ...... |
| **1901-2.** | | | | | | | | | | | | |
| 1 | 21 | 36 | 29 | 25 | 30 | 58 | 62 | 48 | 30 | 16 | 7 | 5 |
| 2 | 20 | 34 | 29 | 25 | 30 | 60 | 62 | 48 | 28 | 16 | 7 | 5 |
| 3 | 20 | 33 | 29 | 25 | 30 | 60 | 62 | 48 | 26 | 16 | 8 | 5 |
| 4 | 20 | 32 | 30 | 25 | 30 | 60 | 62 | 47 | 26 | 17 | 7 | 5 |
| 5 | 20 | 30.5 | 30 | 25 | 30 | 61 | 62 | 46 | 25 | 17 | 8 | 5 |
| 6 | 20 | 30 | 30 | 25 | 29 | 62 | 62 | 46 | 23 | 16 | 8 | 5 |
| 7 | 17 | 30 | 30 | 25 | 29 | 62 | 62 | 46 | 21 | 16 | 7 | 5 |
| 8 | 15.5 | 30 | 29 | 25 | 29 | 62 | 62 | 45 | 20 | 14 | 7 | 4 |
| 9 | 16 | 30 | 28.7 | 25 | 29 | 62 | 62 | 43 | 20 | 12 | 8 | 5 |
| 10 | 16 | 50 | 29 | 25 | 29 | 62 | 62 | 43 | 22 | 12 | 8 | 5 |
| 11 | 15.5 | 46 | 29 | 25 | 29 | 62 | 62 | 43 | 25 | 11 | 8 | 5 |
| 12 | 14.5 | 36 | 29 | 24 | 29 | 62 | 62 | 42 | 25 | 10 | 8 | 5 |
| 13 | 14.5 | 35 | 29 | 24 | 28 | 62 | 46 | 40 | 22 | 10 | 8 | 5 |
| 14 | 14.5 | 34 | 29 | 24 | 28 | 62 | 62 | 44 | 22 | 10 | 8 | 5 |
| 15 | 15 | 33 | 29.5 | 24 | 28 | 62 | 62 | 42 | 21 | 10 | 8 | 5 |
| 16 | 15.5 | 32.5 | 29 | 24 | 28 | 62 | 62 | 40 | 20 | 10 | 8 | 6 |
| 17 | 15.5 | 32 | 28.5 | 24 | 28 | 62 | 62 | 40 | 20 | 10 | 8 | 6 |
| 18 | 15.5 | 32 | 28.5 | 27 | 28 | 62 | 60 | 37 | 19 | 10 | 8 | 6 |
| 19 | 16 | 31 | 28.5 | 30 | 27 | 62 | 61 | 37 | 18 | 10 | 8 | 6 |
| 20 | 15.5 | 31 | 28.5 | 28 | 27 | 62 | 61 | 37 | 16 | 8 | 8 | 6 |
| 21 | 14.5 | 31 | 28 | 26 | 32 | 62 | 62 | 37 | 16 | 8 | 7 | 6 |
| 22 | 14.5 | 30 | 28 | 26 | 38 | 62 | 62 | 36 | 16 | 8 | 6 | 6 |
| 23 | 16 | 29 | 27 | 26 | 34 | 62 | 60 | 35 | 14 | 8 | 6 | 6 |
| 24 | 17 | 29 | 27 | 51 | 35 | 62 | 60 | 34 | 14 | 8 | 7 | 6 |
| 25 | 18 | 30 | 27 | 42 | 40 | 62 | 56 | 34 | 14 | 8 | 6 | 6 |
| 26 | 64 | 30 | 27 | 32 | 63 | 62 | 54 | 34 | 14 | 9 | 6 | 6 |
| 27 | 52 | 29 | 26 | 32 | 62 | 62 | 52 | 32 | 14 | 10 | 6 | 6 |
| 28 | 56 | 29 | 26 | 32 | 62 | 62 | 50 | 30 | 15 | 10 | 6 | 6 |
| 29 | 50 | 29 | 26 | 32 | ...... | 62 | 48 | 30 | 15 | 10 | 6 | 6 |
| 30 | ...... | 29 | ...... | 31 | ...... | 55 | 48 | 30 | 14 | 9 | 6 | 6 |
| 31 | ...... | ...... | ...... | 30 | ...... | 62 | ...... | 30 | ...... | 8 | 6 | ...... |

[a] Power conduit washed out soon after noon.

*Daily discharge, in second-feet, of the San Gabriel canals near Azusa, Cal., for 1898-1906*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902-3. | | | | | | | | | | | | |
| 1 | 6 | 9 | 16 | 30.5 | 68 | 59 | 72 | 70 | 70 | 58.5 | 34.8 | 23.5 |
| 2 | 6 | 8 | 16 | 30 | 68 | 57 | 22 | 70 | 70 | 57 | 34.8 | 23 |
| 3 | 6 | 8 | 16 | 30 | 68 | 57 | 30 | 70 | 70 | 55 | 34.5 | 23 |
| 4 | 6 | 8 | 16 | 28.5 | 70 | 70 | 30 | 70 | 70 | 53 | 32.5 | 22 |
| 5 | 6 | 8 | 17 | 28 | 70 | 72 | 32 | 70 | 68 | 52 | 31.5 | 21 |
| 6 | 6 | 8 | 17 | 27 | 70 | 72 | 54 | 70 | 70 | 50 | 30.7 | 24 |
| 7 | 6 | 8 | 18 | 27.5 | 70 | 72 | 54 | 70 | 70 | 50 | 30.7 | 27 |
| 8 | 6 | 9 | 18 | 26 | 70 | 72 | 62 | 70 | 68 | 49 | 30.7 | 23 |
| 9 | 6 | 9 | 24 | 25 | 70 | 72 | 62 | 70 | 68 | 47 | 30.2 | 23 |
| 10 | 6 | 9 | 29 | 25 | 70 | 72 | 62 | 70 | 70 | 46 | 30 | 22.5 |
| 11 | 7 | 62 | 36 | 24.5 | 70 | 72 | 62 | 70 | 84 | 43.5 | 30 | 22.5 |
| 12 | 8 | 43 | 32 | 24.5 | 70 | 72 | 62 | 70 | 84 | 43 | 30 | 24.7 |
| 13 | 8 | 25 | 28 | 24 | 70 | 72 | 62 | 70 | 81 | 43 | 30 | 26.0 |
| 14 | 8 | 23 | 26 | 23.5 | 70 | 72 | 62 | 70 | 84 | 43 | 30 | 27.5 |
| 15 | 6 | 23 | 25 | 23 | 70 | 72 | 62 | 70 | 84 | 43 | 29.5 | 25.5 |
| 16 | 6 | 23 | 25 | 22.5 | 74 | 72 | 62 | 70 | 83 | 42 | 28 | 23.5 |
| 17 | 6 | 22 | 46 | 22 | 74 | 72 | 63 | 70 | 82 | 42 | 26.7 | 22.5 |
| 18 | 6 | 22 | 68 | 22 | 74 | 72 | 62 | 70 | 81 | 42 | 25.8 | 23 |
| 19 | 6 | 22 | 61 | 22 | 74 | 72 | 16 | 70 | 80 | 42 | 26.3 | 23 |
| 20 | 7 | 22 | 55 | 22 | 74 | 72 | 18 | 70 | 79.5 | 41 | 26.3 | 23 |
| 21 | 7 | 21 | 48 | 22 | 74 | 72 | 40 | 70 | 79 | 40 | 25.8 | 23 |
| 22 | 8 | 20 | 42 | 22 | 72 | 72 | 52 | 70 | 79 | 38 | 25.3 | 22.5 |
| 23 | 9 | 20 | 35 | 22 | 70 | 72 | 62 | 70 | 81 | 38 | 25.8 | 21.7 |
| 24 | 10 | 20 | 35 | 22.5 | 68 | 72 | 62 | 50 | 80 | 37.5 | 26.4 | 21.7 |
| 25 | 10 | 20 | 35 | 23 | 65 | 72 | 62 | 70 | 73 | 37 | 26.9 | 24 |
| 26 | 9 | 20 | 35 | 23 | 63 | 72 | 0 | 60 | 66 | 36.5 | 27 | 24.5 |
| 27 | 8 | 20 | 35 | 22 | 61 | 72 | 68 | 60 | 64 | 36 | 27 | 29 |
| 28 | 8 | 20 | 34 | 64 | 61 | 72 | 68 | 68 | 63 | 36 | 26 | 34.5 |
| 29 | 8 | 19 | 33 | 64 | ...... | 72 | 68 | 70 | 63 | 35.5 | 25 | 31.5 |
| 30 | 8 | 17 | 32 | 68 | ...... | 72 | 68 | 70 | 62 | 35.3 | 25 | 31.5 |
| 31 | 8 | ...... | 31 | 68 | ...... | 72 | ...... | 70 | ...... | 34.8 | 24.5 | ...... |
| 1903-4. | | | | | | | | | | | | |
| 1 | 31.5 | 21.5 | 21.5 | 24 | 23 | 47 | 66 | 67 | 38 | 18 | 10 | 11 |
| 2 | 31 | 22.5 | 24 | 24 | 23.5 | 51.5 | 66 | 67 | 36.5 | 17.5 | 9.5 | 10.5 |
| 3 | 30 | 22.5 | 24 | 24 | 23.5 | 47 | 66 | 67 | 35.5 | 17 | 10 | 10.5 |
| 4 | 29 | 22.5 | 23 | 24 | 23.5 | 42 | 66 | 67 | 32.5 | 17 | 10 | 10.8 |
| 5 | 26.5 | 22.5 | 22.5 | 24 | 59 | 40 | 66 | 67 | 32 | 16.5 | 10 | 10 |
| 6 | 26.5 | 23 | 24 | 23.5 | 27 | 38 | 66 | 67 | 31 | 16 | 10 | 9 |
| 7 | 26 | 23 | 23.5 | 23.3 | 31.5 | 37.5 | 66 | 67 | 30 | 16 | 12 | 8.5 |
| 8 | 26 | 24.5 | 24.5 | 24 | 31 | 35.5 | 68 | 67 | 30 | 15.7 | 12.7 | 7.5 |
| 9 | 26 | 24 | 24.5 | 24.5 | 30 | 35 | 68 | 67 | 29 | 15.5 | 11.5 | 8.5 |
| 10 | 27.8 | 24 | 24.5 | 24.5 | 30 | 35.5 | 68 | 67 | 28 | 15 | 11.5 | 9.5 |
| 11 | 24.8 | 24 | 24.7 | 24.5 | 30 | 60 | 68 | 67 | 26.5 | 13.8 | 11 | 9.5 |
| 12 | 22.8 | 24 | 25.5 | 24 | 28 | 60 | 68 | 66 | 25.2 | 14 | 10 | 9.5 |
| 13 | 22.5 | 25 | 25 | 24 | 28 | 56 | 66 | 65 | 25.2 | 14.3 | 29 | 12.5 |
| 14 | 22.5 | 25 | 25 | 23.5 | 28 | 51 | 64 | 64 | 23 | 15.5 | 15 | 11.5 |
| 15 | 22.5 | 25.5 | 25 | 23.5 | 28 | 49 | 64 | 61 | 24 | 15 | 14.5 | 11 |
| 16 | 22 | 25.5 | 25 | 23.5 | 40 | 46 | 61 | 59 | 23 | 15 | 14 | 10 |
| 17 | 21.6 | 25.5 | 24.5 | 23.5 | 41 | 44.5 | 58 | 56 | 22.5 | 14 | 14 | 11 |
| 18 | 20.5 | 24.5 | 24.5 | 28.2 | 38 | 42.6 | 57 | 55 | 22 | 14 | 13.7 | 12 |
| 19 | 21.5 | 24.5 | 24.8 | 27.4 | 34.5 | 41.5 | 66 | 53 | 22 | 13 | 13.7 | 12 |
| 20 | 21.5 | 24.5 | 24.8 | 27.4 | 33 | 50 | 66 | 51 | 22 | 12.5 | 13.7 | 12 |
| 21 | 21 | 25 | 24.8 | 25.5 | 31.4 | 48 | 66 | 49 | 25 | 11.8 | 13.5 | 12 |
| 22 | 21 | 24.5 | 24.8 | 25.2 | 30.8 | 46 | 66 | 48 | 23 | 12 | 15 | 12 |
| 23 | 21 | 23.4 | 24.5 | 24.6 | 30 | 62 | 67 | 44.5 | 23 | 12 | 15 | 11 |
| 24 | 21 | 24 | 24.5 | 24.5 | 29.5 | 62 | 67 | 44.5 | 23 | 11.1 | 14.5 | 12 |
| 25 | 21 | 24 | 24.5 | 24.5 | 29.5 | 62 | 67 | 46 | 22 | 11 | 14.5 | 12.7 |
| 26 | 21 | 23.3 | 24.5 | 24.5 | 29.5 | 62 | 67 | 51 | 19 | 11 | 13 | 13.5 |
| 27 | 21 | 23.3 | 24 | 24 | 30 | 62 | 67 | 46.5 | 18.5 | 12 | 12.5 | 12.5 |
| 28 | 21 | 23.3 | 24 | 23.5 | 0 | 62 | 67 | 40 | 18.5 | 11.5 | 11.5 | 12 |
| 29 | 21 | 23.3 | 24 | 23.5 | 38 | 66 | 67 | 40 | 18.5 | 12 | 11.3 | 10.5 |
| 30 | 21 | 21.5 | 24 | 23.5 | ...... | 66 | 67 | 37 | 17.5 | 12 | 11 | 10.5 |
| 31 | 21 | ...... | 24 | 23 | ...... | 66 | ...... | 38 | ...... | 11 | 11 | ...... |

*Daily discharge, in second-feet, of the San Gabriel canals near Azusa, Cal., for 1898–1906*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 1 | 10.5 | 12.5 | 15 | 30 | 34 | 67 | 90 | 90 | 90 | 95 | 55 | [illegible] |
| 2 | 9 | 12.5 | 15.3 | 23 | 67 | 67 | 90 | 90 | 80 | 95 | 54 | [illegible] |
| 3 | 10 | 12.5 | 15.3 | 21 | 70 | 67 | 90 | 90 | 80 | 95 | 54 | [illegible] |
| 4 | 10 | 12.5 | 15.3 | 30 | 78 | 67 | 90 | 90 | 80 | 95 | 53 | [illegible] |
| 5 | 11 | 12.5 | 15.3 | 18.5 | 90 | 0 | 90 | 90 | 90 | 95 | 52 | [illegible] |
| 6 | 12 | 12.5 | 14.7 | 19 | 73 | 67 | 90 | 90 | 90 | 98 | 39 | [illegible] |
| 7 | 12.5 | 12.5 | 15.2 | 18.5 | 60 | 72 | 90 | 90 | 80 | 96 | 47 | [illegible] |
| 8 | 15 | 12 | 15.3 | 18.5 | 95 | 72 | 90 | 46 | 90 | 95 | 46 | [illegible] |
| 9 | 15.5 | 11 | 16 | 41 | 74 | 72 | 90 | 90 | 90 | 95 | 45 | [illegible] |
| 10 | 15.5 | 11 | 16 | 50 | 66 | 72 | 90 | 90 | 90 | 95 | 45 | [illegible] |
| 11 | 15.5 | 11.5 | 16 | 40 | 66 | 72 | 80 | 90 | 73 | 71 | 46 | [illegible] |
| 12 | 14.5 | 12 | 16 | 35 | 66 | 72 | 80 | 90 | 73 | 74 | 44 | [illegible] |
| 13 | 13.5 | 12.5 | 16 | 31 | 66 | 0 | 80 | 90 | 76 | 75 | 44 | [illegible] |
| 14 | 13 | 12.5 | 16 | 30 | 66 | 70 | 80 | 80 | 76 | 74 | 43 | [illegible] |
| 15 | 13.5 | 12.5 | 16 | 27 | 66 | 70 | 80 | 90 | [illegible] | 74 | 43 | [illegible] |
| 16 | 13.5 | 12.5 | 16 | 30 | 67 | 90 | 80 | 80 | 73 | 74 | 42 | [illegible] |
| 17 | 12 | 12.4 | 16 | 30 | 66 | 90 | 80 | 90 | 73 | 74 | 42 | |
| 18 | 11.5 | 13.3 | 16 | 29 | 66 | 90 | 80 | 90 | 73 | 74 | 41 | |
| 19 | 10.5 | 13 | 16 | 28 | 60 | 70 | 80 | 90 | 73 | 73 | 42 | [illegible] |
| 20 | 9.5 | 13.5 | 15.5 | 27 | 60 | 90 | 80 | 90 | 73 | 72 | 42 | [illegible] |
| 21 | 10 | 13.5 | 15.7 | 55 | 60 | 80 | 90 | 90 | 73 | 70 | 40 | [illegible] |
| 22 | 10.5 | 13.5 | 16.3 | 67 | 66 | 78 | 80 | 80 | 88 | 60 | 40 | [illegible] |
| 23 | 11 | 13.5 | 16.8 | 67 | 60 | 57 | 80 | 90 | 84 | 68 | 39 | [illegible] |
| 24 | 11 | 13 | 17 | 57 | 67 | 54 | 80 | 90 | 84 | 67 | 38 | [illegible] |
| 25 | 11 | 13 | 16.7 | 46 | 68 | 60 | 90 | 90 | 84 | 64 | 38 | [illegible] |
| 26 | 11.5 | 13.5 | 16 | 42 | 67 | 90 | 90 | 90 | 84 | 62 | 36 | [illegible] |
| 27 | 11.5 | 14 | 16.7 | 46 | 67 | 90 | 80 | 90 | 94 | 64 | 36 | [illegible] |
| 28 | 11.5 | 14 | 16.5 | 38 | 67 | 80 | 90 | 90 | 84 | 62 | 35 | [illegible] |
| 29 | 12 | 14.5 | 16 | 37 | ....... | 80 | 80 | 90 | 84 | 60 | 34 | [illegible] |
| 30 | 12.5 | 14.5 | 16 | 36 | ....... | 90 | 80 | 90 | 84 | 68 | 33 | [illegible] |
| 31 | 12.5 | ....... | 46 | 34 | ....... | 90 | ....... | 90 | ....... | 58 | 33 | ....... |
| **1905–6.** | | | | | | | | | | | | |
| 1 | 30 | 29 | 30 | 37 | 50 | 75 | 78 | 76 | 54 | 76 | 76 | [illegible] |
| 2 | 29 | 29 | 47 | 37 | 50 | 60 | 82 | 76 | 82 | 76 | 74 | [illegible] |
| 3 | 28 | 28 | 46 | 37 | 48 | 65 | 50 | 76 | 54 | 76 | 76 | [illegible] |
| 4 | 28 | 28 | 44 | 37 | 50 | 29 | 76 | 76 | 65 | 76 | 76 | [illegible] |
| 5 | 28 | 29 | 44 | 37 | 63 | 29 | 74 | 76 | 76 | 76 | 76 | [illegible] |
| 6 | 28 | 32 | 42 | 37 | 63 | 74 | 76 | 76 | 76 | 76 | 76 | [illegible] |
| 7 | 28 | 44 | 42 | 37 | 56 | 70 | 78 | 76 | 76 | 76 | 76 | [illegible] |
| 8 | 28 | 96 | 41 | 37 | 47 | 70 | 78 | 76 | 76 | 76 | 76 | [illegible] |
| 9 | 27 | 53 | 30 | 37 | 47 | 71 | 77 | 76 | 76 | 76 | 74 | [illegible] |
| 10 | 27 | 42 | 37 | 36 | 57 | 64 | 76 | 76 | 76 | 76 | 76 | [illegible] |
| 11 | 27 | 36 | 37 | 36 | 72 | 58 | 65 | 76 | 76 | 76 | 76 | [illegible] |
| 12 | 27 | 36 | 37 | 37 | 60 | 74 | 74 | 76 | 76 | 76 | 76 | [illegible] |
| 13 | 28 | 36 | 28 | 37 | 15 | 74 | 78 | 76 | 76 | 76 | 76 | [illegible] |
| 14 | 29 | 34 | 30 | 40 | 15 | 74 | 76 | 76 | 76 | 76 | 76 | [illegible] |
| 15 | 29 | 34 | 30 | 52 | 15 | 77 | 76 | 76 | 76 | 76 | 76 | [illegible] |
| 16 | 29 | 45 | 30 | 41 | 15 | 78 | 76 | 76 | 76 | 76 | 76 | [illegible] |
| 17 | 30 | 53 | 30 | 41 | 40 | 78 | 72 | 76 | 76 | 76 | 76 | [illegible] |
| 18 | 30 | 43 | 30 | 42 | 74 | 78 | 76 | 76 | 76 | 76 | 72 | 46 |
| 19 | 30 | 40 | 38 | 0 | 74 | 77 | 76 | 76 | 76 | 76 | 68 | 45 |
| 20 | 29 | 42 | 46 | 76 | 74 | 75 | 76 | 76 | 76 | 76 | 66 | 45 |
| 21 | 29 | 41 | 42 | 76 | 75 | 72 | 76 | 76 | 76 | 76 | 68 | 44 |
| 22 | 31 | 38 | 38 | 76 | 74 | 71 | 76 | 76 | 76 | 76 | 66 | 44 |
| 23 | 32 | 38 | 38 | 76 | 74 | 65 | 76 | 76 | 76 | 76 | 66 | 43 |
| 24 | 31 | 37 | 37 | 76 | 74 | 78 | 76 | 76 | 76 | 76 | 66 | 43 |
| 25 | 30 | 37 | 38 | 66 | 70 | 76 | 76 | 76 | 76 | 76 | 64 | 43 |
| 26 | 29 | 37 | 38 | 68 | 70 | 78 | 76 | 76 | 76 | 76 | 60 | 43 |
| 27 | 29 | 97 | 38 | 61 | 73 | 78 | 76 | 76 | 76 | 76 | 60 | 43 |
| 28 | 28 | 87 | 38 | 57 | 76 | 78 | 76 | 76 | 76 | 76 | 59 | 43 |
| 29 | 28 | 62 | 37 | 58 | ....... | 76 | 76 | 53 | 76 | 76 | 59 | 42 |
| 30 | 29 | 53 | 37 | 54 | ....... | 76 | 76 | 48 | 76 | 76 | 58 | 42 |
| 31 | 28 | ....... | 38 | 52 | ....... | 78 | ....... | 60 | ....... | 76 | 57 | ....... |

*Daily discharge, in second-feet, of Pacific Light & Power Co.'s canal near Azusa, Cal., for 1906–12.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1906–7.** | | | | | | | | | | | | |
| 1 | 42 | 38 | 45 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 2 | 42 | 38 | 46 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 3 | 42 | 36 | 58 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 4 | 42 | 38 | 64 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 5 | 41 | 38 | 51 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 6 | 40 | 39 | 51 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 7 | 40 | 39 | 47 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 72 |
| 8 | 40 | 39 | 47 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 67 |
| 9 | 40 | 36 | 50 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 59 |
| 10 | 40 | 38 | 76 | 76 | 76 | 0 | 76 | 76 | 76 | 76 | 76 | 59 |
| 11 | 40 | 36 | 60 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 57 |
| 12 | 40 | 38 | 75 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 57 |
| 13 | 40 | 38 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 57 |
| 14 | 39 | 38 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 57 |
| 15 | 38 | 36 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 57 |
| 16 | 38 | 38 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 57 |
| 17 | 39 | 38 | 76 | 76 | 76 | 0 | 76 | 76 | 76 | 76 | 76 | 57 |
| 18 | 39 | 37 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 57 |
| 19 | 40 | 37 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 57 |
| 20 | 41 | 36 | 72 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 56 |
| 21 | 40 | 41 | 65 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 53 |
| 22 | 40 | 45 | 62 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 51 |
| 23 | 40 | 47 | 59 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 50 |
| 24 | 40 | 45 | 56 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 50 |
| 25 | 40 | 45 | 56 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 50 |
| 26 | 40 | 46 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 50 |
| 27 | 39 | 46 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 50 |
| 28 | 38 | 45 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 50 |
| 29 | 36 | 45 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 50 |
| 30 | 35 | 45 | 76 | 76 | ...... | 76 | 76 | 76 | 76 | 76 | 76 | 51 |
| 31 | 36 | ...... | 76 | 76 | ...... | 76 | ...... | 76 | ...... | 76 | 76 | ...... |
| **1907–8.** | | | | | | | | | | | | |
| 1 | 51 | 76 | 54 | 56 | 76 | 76 | 76 | 76 | 76 | 46 | 37 | 29 |
| 2 | 50 | 76 | 54 | 54 | 76 | 76 | 76 | 76 | 76 | 47 | 42 | 29 |
| 3 | 50 | 76 | 53 | 54 | 76 | 76 | 76 | 76 | 76 | 45 | 43 | 28 |
| 4 | 50 | 71 | 54 | 52 | 76 | 76 | 76 | 76 | 76 | 44 | 42 | 26 |
| 5 | 55 | 69 | 54 | 52 | 76 | 76 | 76 | 76 | 76 | 45 | 40 | 26 |
| 6 | 63 | 66 | 54 | 51 | 76 | 76 | 76 | 76 | 76 | 43 | 40 | 26 |
| 7 | 60 | 65 | 76 | 51 | 76 | 76 | 76 | 76 | 76 | 43 | 39 | 26 |
| 8 | 56 | 66 | 76 | 50 | 76 | 76 | 76 | 76 | 76 | 42 | 39 | 28 |
| 9 | 54 | 67 | 67 | 50 | 76 | 76 | 76 | 76 | 76 | 42 | 37 | 29 |
| 10 | 50 | 76 | 63 | 50 | 76 | 76 | 76 | 27 | 76 | 42 | 42 | 32 |
| 11 | 50 | 73 | 66 | 50 | 76 | 76 | 76 | 76 | 76 | 42 | 41 | 30 |
| 12 | 50 | 66 | 62 | 46 | 76 | 76 | 76 | 76 | 76 | 42 | 39 | 28 |
| 13 | 50 | 64 | 56 | 49 | 76 | 76 | 76 | 76 | 76 | 42 | 38 | 27 |
| 14 | 50 | 63 | 57 | 76 | 76 | 76 | 76 | 76 | 76 | 41 | 37 | 26 |
| 15 | 65 | 62 | 57 | 76 | 76 | 76 | 76 | 76 | 76 | 40 | 37 | 26 |
| 16 | 76 | 61 | 57 | 66 | 76 | 76 | 76 | 76 | 76 | 39 | 37 | 26 |
| 17 | 76 | 58 | 57 | 56 | 76 | 76 | 76 | 76 | 76 | 39 | 35 | 27 |
| 18 | 75 | 59 | 57 | 56 | 76 | 76 | 76 | 76 | 76 | 39 | 34 | 28 |
| 19 | 70 | 59 | 57 | 56 | 76 | 76 | 76 | 76 | 76 | 39 | 34 | 27 |
| 20 | 67 | 61 | 57 | 56 | 76 | 76 | 76 | 76 | 76 | 36 | 32 | 26 |
| 21 | 61 | 61 | 56 | 54 | 76 | 76 | 76 | 76 | 76 | 37 | 32 | 28 |
| 22 | 65 | 61 | 55 | 54 | 76 | 76 | 76 | 76 | 76 | 37 | 31 | 25 |
| 23 | 76 | 61 | 55 | 65 | 76 | 76 | 76 | 76 | 76 | 36 | 30 | 26 |
| 24 | 76 | 56 | 54 | 76 | 76 | 76 | 76 | 76 | 56 | 36 | 30 | 62 |
| 25 | 76 | 57 | 54 | 76 | 76 | 76 | 76 | 76 | 54 | 36 | 30 | 54 |
| 26 | 76 | 57 | 54 | 76 | 76 | 76 | 76 | 76 | 53 | 36 | 30 | 39 |
| 27 | 76 | 57 | 54 | 76 | 76 | 76 | 76 | 76 | 52 | 36 | 30 | 36 |
| 28 | 76 | 57 | 65 | 76 | 76 | 76 | 76 | 76 | 51 | 36 | 29 | 33 |
| 29 | 76 | 56 | 67 | 76 | ...... | 76 | 76 | 76 | 50 | 35 | 29 | 32 |
| 30 | 76 | 55 | 57 | 76 | ...... | 76 | 76 | 76 | 49 | 34 | 29 | 31 |
| 31 | 76 | ...... | 57 | 76 | ...... | 76 | ...... | 76 | ...... | 33 | 29 | ...... |

*Daily discharge, in second-feet, of Pacific Light & Power Co.'s canal near Azusa, Cal., for 1906–1913*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | | | | |
| 1 | 30 | 32 | 34 | 38 | 66 | 67 | 67 | 67 | 40 | 66 | 59 | 52 |
| 2 | 31 | 32 | 57 | 39 | 67 | 67 | 67 | 66 | 40 | 68 | 59 | 49 |
| 3 | 38 | 32 | 50 | 39 | 67 | 67 | 67 | 66 | 65 | 68 | 58 | 47 |
| 4 | 36 | 32 | 50 | 39 | 67 | 67 | 0 | 67 | 66 | 69 | 56 | 45 |
| 5 | 35 | 32 | 81 | 39 | 67 | 67 | 67 | 67 | 66 | 68 | 56 | 44 |
| 6 | 34 | 31 | 67 | 39 | 67 | 67 | 67 | 67 | 66 | 68 | 55 | 42 |
| 7 | 32 | 32 | 58 | 39 | 67 | 67 | 67 | 66 | 66 | 69 | 55 | 41 |
| 8 | 30 | 32 | 47 | 39 | 67 | 67 | 67 | 67 | 66 | 69 | 55 | 41 |
| 9 | 30 | 32 | 47 | 62 | 67 | 67 | 67 | 67 | 66 | 69 | 53 | 40 |
| 10 | 29 | 32 | 44 | 52 | 67 | 67 | 69 | 67 | 66 | 69 | 52 | 40 |
| 11 | 29 | 33 | 44 | 58 | 66 | 67 | 67 | 62 | 66 | 68 | 51 | 39 |
| 12 | 30 | 33 | 43 | 58 | 65 | 67 | 67 | 62 | 66 | 68 | 50 | 39 |
| 13 | 32 | 33 | 43 | 78 | 66 | 67 | 67 | 34 | 66 | 68 | 49 | 38 |
| 14 | 32 | 33 | 43 | 60 | 66 | 67 | 67 | 30 | 66 | 68 | 48 | 37 |
| 15 | 32 | 33 | 41 | 62 | 66 | 67 | 67 | 30 | 66 | 68 | 48 | 37 |
| 16 | 34 | 33 | 41 | 62 | 66 | 67 | 67 | 40 | 66 | 68 | 48 | 36 |
| 17 | 40 | 33 | 43 | 62 | 67 | 67 | 67 | 40 | 66 | 68 | 49 | 36 |
| 18 | 40 | 33 | 40 | 62 | 67 | 67 | 67 | 40 | 66 | 68 | 56 | 36 |
| 19 | 39 | 33 | 40 | 59 | 67 | 67 | 67 | 40 | 66 | 68 | 56 | 35 |
| 20 | 39 | 33 | 40 | 58 | 67 | 67 | 67 | 0 | 66 | 67 | 53 | 35 |
| 21 | 38 | 33 | 40 | 60 | 67 | 67 | 67 | 0 | 67 | 67 | 49 | 35 |
| 22 | 36 | 33 | 40 | 32 | 67 | 67 | 67 | 0 | 67 | 66 | 48 | 35 |
| 23 | 34 | 33 | 40 | 68 | 67 | 67 | 67 | 0 | 68 | 66 | 47 | 35 |
| 24 | 34 | 33 | 40 | 62 | 67 | 67 | 67 | 0 | 67 | 67 | 45 | 36 |
| 25 | 34 | 33 | 40 | 64 | 67 | 67 | 67 | 0 | 67 | 67 | 44 | 37 |
| 26 | 32 | 33 | 40 | 62 | 67 | 67 | 67 | 0 | 60 | 67 | 43 | 36 |
| 27 | 33 | 36 | 40 | 62 | 67 | 67 | 67 | 0 | 60 | 68 | 43 | [illegible] |
| 28 | 32 | 35 | 39 | 62 | 67 | 67 | 67 | 0 | 68 | 67 | 43 | [illegible] |
| 29 | 32 | 34 | 39 | 62 | ...... | 67 | 67 | 0 | 60 | 64 | 42 | [illegible] |
| 30 | 32 | 34 | 39 | 62 | ...... | 67 | 67 | 0 | 66 | 62 | 52 | [illegible] |
| 31 | 32 | ...... | 39 | 62 | ...... | 67 | ...... | 0 | ...... | 61 | 51 | ...... |
| 1909–10. | | | | | | | | | | | | |
| 1 | 36 | 36 | 54 | 53 | 60 | 73 | 73 | 73 | 67 | 49 | 33 | 24 |
| 2 | 43 | 35 | 53 | 49 | 72 | 73 | 73 | 72 | 65 | 50 | 32 | 24 |
| 3 | 50 | 34 | 54 | 57 | 74 | 73 | 74 | 72 | 68 | 49 | 31 | 24 |
| 4 | 46 | 35 | 53 | 68 | 74 | 73 | 73 | 72 | 68 | 48 | 31 | 24 |
| 5 | 42 | 35 | 57 | 71 | 74 | 73 | 73 | 72 | 68 | 47 | 31 | 25 |
| 6 | 41 | 35 | 68 | 70 | 74 | 73 | 73 | 72 | 67 | 45 | 30 | 25 |
| 7 | 41 | 36 | 62 | 71 | 74 | 73 | 73 | 73 | 67 | 45 | 29 | 24 |
| 8 | 39 | 36 | 66 | 71 | 73 | 73 | 72 | 72 | 66 | 43 | 29 | 24 |
| 9 | 37 | 46 | 74 | 72 | 73 | 73 | 73 | 72 | 63 | 42 | 29 | 24 |
| 10 | 35 | 51 | 74 | 72 | 73 | 73 | 73 | 72 | 63 | 42 | 29 | 23 |
| 11 | 35 | 47 | 74 | 73 | 74 | 73 | 73 | 73 | 61 | 40 | 29 | 23 |
| 12 | 35 | 46 | 73 | 72 | 73 | 73 | 72 | 72 | 60 | 41 | 29 | 23 |
| 13 | 35 | 43 | 74 | 73 | 74 | 73 | 72 | 72 | 61 | 40 | 29 | 23 |
| 14 | 35 | 53 | 74 | 73 | 65 | 73 | 72 | 73 | 62 | 40 | 29 | 24 |
| 15 | 35 | 66 | 74 | 72 | 66 | 73 | 72 | 72 | 66 | 39 | 29 | 24 |
| 16 | 37 | 55 | 74 | 73 | 71 | 73 | 72 | 73 | 66 | 39 | 25 | 24 |
| 17 | 39 | 52 | 74 | 73 | 73 | 73 | 73 | 72 | 64 | 37 | 28 | 24 |
| 18 | 39 | 50 | 74 | 72 | 73 | 73 | 72 | 73 | 58 | 38 | 26 | 23 |
| 19 | 37 | 49 | 74 | 65 | 73 | 73 | 72 | 71 | 56 | 38 | 25 | [illegible] |
| 20 | 37 | 47 | 74 | 22 | 73 | 73 | 72 | 71 | 54 | 36 | 26 | [illegible] |
| 21 | 37 | 47 | 74 | 70 | 74 | 73 | 73 | 70 | 54 | 37 | 26 | [illegible] |
| 22 | 36 | 47 | 74 | 73 | 73 | 73 | 72 | 70 | 55 | 37 | 26 | [illegible] |
| 23 | 35 | 46 | 74 | 75 | 73 | 73 | 72 | 70 | 56 | 36 | 26 | [illegible] |
| 24 | 34 | 45 | 74 | 70 | 73 | 73 | 71 | 70 | 54 | 35 | 26 | [illegible] |
| 25 | 34 | 45 | 74 | 68 | 73 | 73 | 72 | 70 | 52 | 36 | 25 | [illegible] |
| 26 | 34 | 62 | 74 | 74 | 73 | 73 | 71 | 70 | 50 | 34 | 25 | [illegible] |
| 27 | 34 | 82 | 74 | 60 | 73 | 73 | 73 | 70 | 49 | 35 | 26 | [illegible] |
| 28 | 35 | 65 | 74 | 60 | 73 | 73 | 72 | 60 | 50 | 35 | 25 | [illegible] |
| 29 | 36 | 50 | 74 | 60 | ...... | 73 | 72 | 60 | 50 | 35 | 25 | [illegible] |
| 30 | 37 | 56 | 74 | 60 | ...... | 73 | 72 | 68 | 50 | 34 | 25 | [illegible] |
| 31 | 38 | ...... | 75 | 60 | ...... | 73 | ...... | 68 | ...... | 35 | 25 | ...... |

*Daily discharge, in second-feet, of Pacific Light & Power Co. canal near Azusa, Cal., for 1906–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1910–11.** | | | | | | | | | | | | |
| 1 | 23 | 26 | 33 | 33 | 70 | 75 | 70 | 64 | 72 | 71 | 69 | 45 |
| 2 | 22 | 26 | 32 | 33 | 68 | 75 | 73 | 71 | 72 | 44 | 69 | 46 |
| 3 | 23 | 29 | 31 | 33 | 69 | 75 | 73 | 71 | 72 | 71 | 69 | 47 |
| 4 | 23 | 31 | 32 | 33 | 70 | 67 | 74 | 71 | 71 | 71 | 69 | 46 |
| 5 | 24 | 29 | 32 | 33 | 72 | 71 | 74 | 71 | 71 | 72 | 68 | 48 |
| 6 | 23 | 28 | 32 | 32 | 72 | 68 | 74 | 71 | 70 | 72 | 68 | 49 |
| 7 | 22 | 29 | 32 | 32 | 73 | 66 | 74 | 71 | 70 | 72 | 68 | 48 |
| 8 | 23 | 29 | 32 | 32 | 71 | 71 | 74 | 71 | 72 | 72 | 66 | 46 |
| 9 | 23 | 29 | 31 | 37 | 72 | 65 | 74 | 71 | 71 | 72 | 65 | 47 |
| 10 | 23 | 28 | 32 | 44 | 73 | 55 | 74 | 71 | 72 | 72 | 65 | 46 |
| 11 | 25 | 27 | 32 | 61 | 72 | 58 | 74 | 70 | 72 | 72 | 64 | 44 |
| 12 | 26 | 27 | 33 | 62 | 72 | 60 | 74 | 70 | 71 | 72 | 61 | 43 |
| 13 | 26 | 39 | 32 | 64 | 72 | 60 | 74 | 70 | 71 | 72 | 60 | 44 |
| 14 | 26 | 36 | 32 | 66 | 72 | 61 | 74 | 40 | 72 | 71 | 58 | 43 |
| 15 | 32 | 36 | 32 | 68 | 72 | 60 | 74 | 70 | 71 | 72 | 59 | 43 |
| 16 | 32 | 35 | 32 | 70 | 72 | 63 | 74 | 71 | 71 | 72 | 58 | 41 |
| 17 | 31 | 34 | 32 | 69 | 75 | 64 | 74 | 71 | 72 | 72 | 56 | 41 |
| 18 | 30 | 34 | 33 | 74 | 75 | 68 | 74 | 72 | 72 | 72 | 56 | 41 |
| 19 | 27 | 34 | 34 | 75 | 75 | 24 | 74 | 72 | 72 | 72 | 54 | 40 |
| 20 | 26 | 32 | 36 | 75 | 75 | 73 | 73 | 72 | 72 | 72 | 54 | 40 |
| 21 | 26 | 32 | 35 | 74 | 73 | 74 | 73 | 54 | 72 | 72 | 54 | 41 |
| 22 | 26 | 32 | 33 | 74 | 75 | 69 | 73 | 71 | 72 | 72 | 54 | 41 |
| 23 | 25 | 32 | 33 | 74 | 75 | 69 | 73 | 72 | 71 | 72 | 52 | 42 |
| 24 | 24 | 31 | 35 | 74 | 75 | 69 | 72 | 72 | 71 | 72 | 52 | 42 |
| 25 | 24 | 31 | 35 | 74 | 75 | 69 | 72 | 72 | 71 | 72 | 51 | 42 |
| 26 | 25 | 34 | 34 | 74 | 75 | 72 | 72 | 72 | 71 | 72 | 52 | 42 |
| 27 | 25 | 34 | 34 | 74 | 75 | 71 | 71 | 72 | 71 | 72 | 52 | 42 |
| 28 | 24 | 33 | 33 | 74 | 75 | 71 | 72 | 72 | 71 | 70 | 51 | 42 |
| 29 | 24 | 33 | 33 | 74 | ....... | 71 | 71 | 72 | 71 | 70 | 50 | 63 |
| 30 | 27 | 33 | 32 | 74 | ....... | 70 | 72 | 72 | 71 | 70 | 49 | 66 |
| 31 | 27 | ....... | 33 | 74 | ....... | 68 | ....... | 72 | ....... | 70 | 46 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| **1911–12.** | | | | | | | | | |
| 1 | 67 | 49 | 44 | 48 | 42 | 40 | 75 | 54 | 77 |
| 2 | 70 | 49 | 43 | 53 | 42 | 42 | 75 | 58 | 77 |
| 3 | 66 | 45 | 43 | 49 | 41 | 39 | 75 | 59 | 77 |
| 4 | 60 | 45 | 44 | 48 | 41 | 56 | 75 | 69 | 75 |
| 5 | 56 | 46 | 45 | 49 | 41 | 72 | 75 | 75 | 77 |
| 6 | 55 | 47 | 50 | 49 | 40 | 72 | 75 | 77 | 77 |
| 7 | 52 | 47 | 56 | 48 | 40 | 71 | 75 | 63 | 77 |
| 8 | 51 | 46 | 49 | 48 | 40 | 74 | 75 | 57 | 77 |
| 9 | 52 | 47 | 47 | 47 | 41 | 74 | 74 | 60 | 77 |
| 10 | 51 | 49 | 46 | 47 | 40 | 74 | 74 | 76 | 77 |
| 11 | 51 | 52 | 46 | 48 | 40 | 75 | 73 | 76 | 77 |
| 12 | 50 | 51 | 45 | 48 | 40 | 75 | 75 | 76 | 77 |
| 13 | 48 | 50 | 45 | 47 | 40 | 75 | 75 | 76 | 77 |
| 14 | 47 | 50 | 46 | 0 | 40 | 75 | 75 | 77 | 77 |
| 15 | 45 | 49 | 46 | 45 | 38 | 75 | 75 | 77 | 77 |
| 16 | 44 | 50 | 46 | 45 | 38 | 75 | 75 | 77 | 77 |
| 17 | 45 | 47 | 48 | 45 | 39 | 75 | 75 | 77 | 77 |
| 18 | 45 | 46 | 48 | 45 | 38 | 75 | 74 | 77 | 77 |
| 19 | 45 | 47 | 47 | 45 | 38 | 75 | 74 | 77 | 76 |
| 20 | 44 | 47 | 47 | 45 | 36 | 75 | 18 | 77 | 75 |
| 21 | 44 | 47 | 47 | 44 | 36 | 75 | 0 | 77 | 72 |
| 22 | 44 | 47 | 45 | 44 | 38 | 75 | 0 | 77 | 72 |
| 23 | 44 | 47 | 46 | 42 | 37 | 75 | 0 | 77 | 73 |
| 24 | 44 | 46 | 45 | 42 | 36 | 75 | 0 | 77 | 75 |
| 25 | 44 | 46 | 45 | 42 | 37 | 75 | 0 | 77 | 71 |
| 26 | 45 | 43 | 45 | 42 | 37 | 75 | 0 | 77 | 69 |
| 27 | 53 | 44 | 46 | 44 | 37 | 75 | 24 | 77 | 67 |
| 28 | 55 | 44 | 47 | 44 | 37 | 75 | 37 | 77 | 66 |
| 29 | 53 | 44 | 54 | 42 | 35 | 75 | 44 | 77 | 63 |
| 30 | 53 | 44 | 50 | 41 | ....... | 75 | 51 | 77 | 63 |
| 31 | 51 | ....... | 48 | 42 | ....... | 75 | ....... | 77 | ....... |

*Monthly discharge of San Gabriel canals near Azusa, Cal., for 1896–1902 and 1910–1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1896.** | | | | |
| January | 26 | 26 | 26 | 1,589 |
| February | 34 | 26 | 30 | 1,736 |
| March | 43 | 35 | 36 | 2,214 |
| April | 45 | 40 | 43 | 2,559 |
| May | 42 | 29 | 36 | 2,214 |
| June | 27 | 13 | 19 | 1,131 |
| July | 15 | 9 | 12 | 738 |
| August | 36 | 9 | 14 | 861 |
| September | 19 | 11 | 13 | 774 |
| The period | | | | 13,800 |
| **1896–97.** | | | | |
| October | 17 | 10 | 11 | 676 |
| November | 24 | 15 | 17 | 1,012 |
| December | 25 | 10 | 20 | 1,230 |
| January | 22 | 13 | 17.56 | 1,072 |
| February | 20 | 3 | 13.10 | 736 |
| March | 21 | 0 | 17.14 | 1,061 |
| April | 60 | 15 | 35.30 | 2,102 |
| May | 68 | 55 | 62.97 | 3,510 |
| June | 71 | 54 | 63.20 | 3,759 |
| July | 52 | 27 | 38.13 | 2,343 |
| August | 34 | 22 | 26.45 | 1,613 |
| September | 23 | 18 | 20.66 | 1,226 |
| The year | 71 | 0 | 28.5 | 30,600 |
| **1897–98.** | | | | |
| October | 26 | 10 | 18.03 | 1,106 |
| November | 29 | 16 | 23.30 | 1,385 |
| December | 29 | 25 | 26.84 | 1,648 |
| January | 32 | 23 | 26 | 1,591 |
| February | 34 | 10 | 29 | 1,615 |
| March | 48 | 28 | 35 | 2,129 |
| April | 37 | 25.3 | 33 | 1,960 |
| May | 45 | 20.0 | 32 | 1,947 |
| June | 30 | 14.5 | 19 | 1,139 |
| July | 14 | 9 | 11 | 672 |
| August | 9 | 5 | 7 | 456 |
| September | 10 | 6.1 | 8 | 467 |
| The year | 48 | 5 | 22.3 | 16,100 |
| **1898–99.** | | | | |
| October | 10 | 7.5 | 9 | 533 |
| November | 11 | 8 | 10 | 589 |
| December | 18 | 11.7 | 14 | 832 |
| January | 33 | 15 | 21.8 | 1,340 |
| February | 27 | 20 | 22 | 1,244 |
| March | 40 | 18 | 26 | 1,623 |
| April | 28 | 16 | 21 | 1,262 |
| May | 17 | 12 | 14 | 842 |
| June | 22 | 5 | 10 | 565 |
| July | 4 | 3 | 4 | 221 |
| August | 6 | 4 | 5 | 295 |
| September | 6 | 3 | 4 | 238 |
| The year | 40 | 3 | 13.4 | 9,560 |
| **1899–1900.** | | | | |
| October | 26 | 4 | 11.1 | 683 |
| November | 24 | 10 | 14.0 | 847 |
| December | 39 | 16 | 20 | 1,247 |
| January | 50 | 22 | 30 | 1,845 |
| February | 23 | 18 | 20 | 1,111 |
| March | 30 | 16 | 20 | 1,230 |
| April | 26 | 13 | 17 | 1,012 |
| May | 56 | 16 | 35 | 2,152 |
| June | 22 | 8 | 15 | 893 |
| July | 10 | 4 | 6 | 369 |
| August | 5 | 4 | 4 | 246 |
| September | 6 | 3 | 4 | 238 |
| The year | 56 | 3 | 16.3 | 11,900 |

*Monthly discharge of San Gabriel canals near Azusa, Cal., for 1896–1902, and 1910–1912*—Continued.

| March. | Discharge in second-feet. | | | Run-off (total in acre-feet.) |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1900-1901.** | | | | |
| October | 6 | 4 | 5 | 307 |
| November | 55 | 5 | 14 | 833 |
| December | 53 | 31 | 40 | 1,269 |
| January | 90 | 0 | 58 | 3,566 |
| February | 70 | 5 | 67 | 3,721 |
| March | 70 | 35 | 63 | 3,874 |
| April | 84 | 55 | 67 | 3,987 |
| May | 72 | 59 | 66 | 4,058 |
| June | 66 | 41 | 56 | 3,332 |
| July | 41 | 24 | 30 | 1,845 |
| August | 27 | 15 | 20 | 1,230 |
| September | 20 | 15 | 17 | 1,012 |
| The year | 90 | 0 | 41.9 | 29,000 |
| **1901-2.** | | | | |
| October | 64 | 0 | 21 | 1,291 |
| November | 50 | 29 | 32 | 1,904 |
| December | 30 | 26 | 27 | 1,660 |
| January | 51 | 24 | 28 | 1,722 |
| February | 63 | 27 | 34 | 1,888 |
| March | 62 | 55 | 61 | 3,750 |
| April | 62 | 46 | 59 | 3,510 |
| May | 48 | 30 | 39 | 2,398 |
| June | 29.5 | 13.5 | 20 | 1,190 |
| July | 17 | 7.5 | 11 | 676 |
| August | 8.5 | 6 | 7 | 430 |
| September | 6 | 4.5 | 5 | 298 |
| The year | 64 | 0 | 28.7 | 20,700 |
| **1902.** | | | | |
| October | 10.5 | 5.5 | 7 | 430 |
| November | 62 | 7.5 | 19 | 1,131 |
| December | 68 | 16 | 32 | 1,968 |
| **1910.** | | | | |
| January | 75 | 22 | 67.5 | 4,150 |
| February | 74 | 65 | 72.5 | 4,030 |
| March | 73 | 73 | 73.0 | 4,490 |
| April | 74 | 71 | 72.3 | 4,300 |
| May | 73 | 68 | 71.1 | 4,370 |
| June | 68 | 49 | 59.8 | 3,560 |
| July | 50 | 34 | 39.9 | 2,450 |
| August | 33 | 25 | 27.8 | 1,710 |
| September | 25 | 21 | 23.1 | 1,370 |
| The period | ........ | ........ | ........ | 30,400 |
| **1910-11.** | | | | |
| October | 32 | 22 | 25.4 | 1,560 |
| November | 39 | 26 | 31.4 | 1,870 |
| December | 36 | 31 | 32.8 | 2,020 |
| January | 75 | 32 | 59.4 | 3,650 |
| February | 75 | 68 | 72.9 | 4,050 |
| March | 75 | 24 | 66.1 | 4,060 |
| April | 74 | 70 | 73.1 | 4,350 |
| May | 72 | 40 | 69.5 | 4,270 |
| June | 72 | 70 | 71.4 | 4,250 |
| July | 72 | 44 | 70.7 | 4,350 |
| August | 69 | 46 | 58.7 | 3,610 |
| September | 66 | 40 | 45.0 | 2,680 |
| The year | 75 | 22 | 56.4 | 40,700 |
| **1911-12.** | | | | |
| October | 70 | 44 | 50.8 | 3,120 |
| November | 52 | 43 | 47.0 | 2,800 |
| December | 56 | 43 | 46.7 | 2,870 |
| January | 53 | 0 | 44.1 | 2,710 |
| February | 42 | 35 | 38.8 | 2,230 |
| March | 75 | 39 | 70.6 | 4,340 |
| April | 75 | 0 | 53.1 | 3,160 |
| May | 77 | 54 | 73.0 | 4,490 |
| June | 77 | 63 | 74.2 | 4,420 |
| The period | ........ | ........ | ........ | 30,100 |

*Combined daily discharge, in second-feet, of San Gabriel River and Pacific Light & Power Co. canal, near Azusa, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 30 | 308 | 300 | 686 | 300 | 154 | 109 | 59 | 52 |
| 2 | 30 | 300 | 300 | 687 | 300 | 152 | 109 | 59 | 45 |
| 3 | 30 | 300 | 300 | 687 | 300 | 173 | 106 | 58 | 45 |
| 4 | 30 | 300 | 300 | 710 | 300 | 172 | 105 | 56 | 45 |
| 5 | 30 | 300 | 300 | 687 | 300 | 170 | 102 | 56 | 43 |
| 6 | 30 | 300 | 300 | 686 | 272 | 168 | 100 | 55 | 42 |
| 7 | 30 | 7,100 | 300 | 686 | 272 | 166 | 98 | 55 | 43 |
| 8 | 30 | 3,190 | 300 | 529 | 272 | 163 | 96 | 55 | 42 |
| 9 | 62 | 1,080 | 300 | 529 | 272 | 161 | 94 | 53 | 40 |
| 10 | 82 | 777 | 300 | 529 | 272 | 158 | 92 | 52 | 40 |
| 11 | 58 | 1,210 | 272 | 400 | 267 | 156 | 89 | 51 | 35 |
| 12 | 58 | 2,160 | 272 | 400 | 267 | 153 | 87 | 50 | 38 |
| 13 | 78 | 2,760 | 272 | 400 | 260 | 151 | 85 | 49 | 38 |
| 14 | 92 | 1,980 | 272 | 400 | 255 | 140 | 83 | 48 | 37 |
| 15 | 85 | 1,210 | 272 | 400 | 255 | 146 | 81 | 48 | 37 |
| 16 | 72 | 971 | 272 | 400 | 255 | 144 | 79 | 48 | 36 |
| 17 | 66 | 777 | 230 | 400 | 252 | 141 | 77 | 49 | 36 |
| 18 | 64 | 687 | 230 | 400 | 250 | 139 | 75 | 56 | 36 |
| 19 | 61 | 605 | 230 | 400 | 246 | 137 | 73 | 56 | 35 |
| 20 | 60 | 529 | 209 | 400 | 242 | 134 | 70 | 53 | 35 |
| 21 | 2,760 | 460 | 1,500 | 400 | 242 | 132 | 69 | 49 | 35 |
| 22 | 4,080 | 460 | 777 | 400 | 242 | 130 | 68 | 48 | 35 |
| 23 | 1,640 | 460 | 529 | 400 | 224 | 129 | 68 | 47 | 35 |
| 24 | 600 | 350 | 460 | 400 | 216 | 126 | 68 | 45 | 36 |
| 25 | 457 | 350 | 400 | 350 | 208 | 123 | 68 | 44 | 37 |
| 26 | 345 | 350 | 605 | 350 | 200 | 123 | 68 | 43 | 36 |
| 27 | 455 | 350 | 777 | 350 | 193 | 121 | 68 | 43 | 38 |
| 28 | 395 | 350 | 687 | 350 | 186 | 118 | 68 | 43 | 37 |
| 29 | 345 | ........ | 687 | 350 | 178 | 117 | 64 | 42 | 36 |
| 30 | 304 | ........ | 605 | 309 | 172 | 111 | 62 | 52 | 37 |
| 31 | 304 | ........ | 605 | ........ | 162 | ........ | 61 | 51 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 36 | 36 | 54 | 12,500 | 322 | 151 | 169 | 102 | 67 | 49 | 33 | 24 |
| 2 | 43 | 35 | 53 | 3,140 | 272 | 151 | 169 | 102 | 68 | 50 | 32 | 24 |
| 3 | 50 | 34 | 54 | 1,900 | 274 | 151 | 170 | 102 | 68 | 49 | 31 | 24 |
| 4 | 46 | 35 | 53 | 1,510 | 274 | 151 | 169 | 102 | 68 | 48 | 31 | 24 |
| 5 | 42 | 35 | 57 | 1,140 | 274 | 151 | 151 | 102 | 68 | 47 | 31 | 25 |
| 6 | 41 | 35 | 68 | 1,140 | 227 | 151 | 151 | 94 | 67 | 45 | 30 | 25 |
| 7 | 41 | 36 | 62 | 1,140 | 227 | 151 | 151 | 95 | 67 | 45 | 29 | 24 |
| 8 | 39 | 36 | 66 | 804 | 226 | 151 | 150 | 94 | 66 | 43 | 29 | 24 |
| 9 | 37 | 46 | 1,500 | 805 | 226 | 151 | 151 | 88 | 63 | 42 | 29 | 24 |
| 10 | 35 | 51 | 536 | 706 | 226 | 151 | 151 | 88 | 63 | 42 | 29 | 23 |
| 11 | 35 | 47 | 216 | 706 | 227 | 151 | 150 | 88 | 61 | 40 | 29 | 23 |
| 12 | 35 | 46 | 166 | 706 | 192 | 136 | 150 | 79 | 60 | 41 | 29 | 23 |
| 13 | 35 | 43 | 118 | 614 | 193 | 136 | 150 | 79 | 61 | 40 | 29 | 23 |
| 14 | 35 | 53 | 118 | 613 | 184 | 136 | 135 | 79 | 62 | 40 | 29 | 24 |
| 15 | 35 | 66 | 107 | 613 | 185 | 136 | 135 | 79 | 66 | 39 | 29 | 24 |
| 16 | 37 | 55 | 107 | 614 | 190 | 136 | 135 | 76 | 66 | 39 | 28 | 24 |
| 17 | 39 | 52 | 98 | 527 | 192 | 136 | 135 | 76 | 64 | 37 | 28 | 24 |
| 18 | 39 | 50 | 98 | 527 | 192 | 151 | 135 | 76 | 58 | 38 | 26 | 23 |
| 19 | 37 | 49 | 98 | 520 | 192 | 136 | 135 | 76 | 56 | 38 | 25 | 22 |
| 20 | 37 | 47 | 98 | 477 | 192 | 136 | 135 | 76 | 54 | 36 | 26 | 23 |
| 21 | 37 | 47 | 148 | 525 | 170 | 136 | 122 | 75 | 54 | 37 | 26 | 23 |
| 22 | 36 | 47 | 118 | 452 | 169 | 249 | 122 | 74 | 55 | 37 | 26 | 21 |
| 23 | 35 | 46 | 132 | 454 | 169 | 169 | 122 | 73 | 56 | 36 | 26 | 21 |
| 24 | 34 | 45 | 118 | 449 | 169 | 169 | 121 | 73 | 54 | 35 | 26 | 21 |
| 25 | 34 | 45 | 107 | 380 | 169 | 151 | 122 | 72 | 52 | 36 | 25 | 23 |
| 26 | 34 | 62 | 107 | 386 | 169 | 151 | 121 | 72 | 50 | 34 | 25 | 22 |
| 27 | 34 | 92 | 107 | 381 | 151 | 151 | 122 | 72 | 49 | 35 | 26 | 23 |
| 28 | 35 | 65 | 98 | 381 | 151 | 192 | 122 | 71 | 50 | 35 | 25 | 22 |
| 29 | 36 | 59 | 98 | 322 | ....... | 192 | 111 | 70 | 50 | 35 | 25 | 22 |
| 30 | 37 | 56 | 98 | 322 | ....... | 192 | 102 | 69 | 50 | 34 | 25 | 22 |
| 31 | 38 | ....... | 5,680 | 260 | ....... | 192 | ....... | 68 | ....... | 35 | 25 | ...... |

*Combined daily discharge, in second-feet, of San Gabriel River and Pacific Light & Power Co. canal, near Azusa, Cal., for 1909–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 1 | 23 | 26 | 33 | 33 | 1,610 | 310 | 650 | 310 | 200 | 99 | 69 | 45 |
| 2 | 22 | 26 | 32 | 33 | 968 | 310 | 753 | 316 | 170 | 72 | 69 | 46 |
| 3 | 23 | 29 | 31 | 33 | 1,210 | 660 | 763 | 314 | 170 | 99 | 69 | 47 |
| 4 | 23 | 31 | 32 | 33 | 3,250 | 2,540 | 664 | 312 | 169 | 99 | 69 | 46 |
| 5 | 24 | 29 | 32 | 33 | 2,210 | 1,900 | 574 | 310 | 147 | 100 | 68 | 48 |
| 6 | 23 | 28 | 32 | 32 | 1,470 | 1,610 | 584 | 309 | 146 | 100 | 68 | 49 |
| 7 | 22 | 29 | 32 | 32 | 1,090 | 1,610 | 594 | 307 | 146 | 91 | 68 | 48 |
| 8 | 23 | 29 | 32 | 32 | 856 | 3,630 | 504 | 305 | 148 | 91 | 66 | 46 |
| 9 | 23 | 29 | 31 | 137 | 972 | 7,720 | 514 | 303 | 147 | 91 | 65 | 47 |
| 10 | 23 | 28 | 32 | 1,110 | 753 | 9,160 | 434 | 302 | 129 | 91 | 65 | 46 |
| 11 | 25 | 27 | 32 | 261 | 752 | 4,560 | 444 | 299 | 129 | 91 | 64 | 44 |
| 12 | 26 | 27 | 32 | 112 | 752 | 3,490 | 449 | 297 | 128 | 91 | 61 | 43 |
| 13 | 26 | 39 | 32 | 80 | 752 | 2,360 | 454 | 245 | 128 | 91 | 60 | 44 |
| 14 | 26 | 36 | 32 | 68 | 752 | 2,120 | 464 | 400 | 129 | 83 | 58 | 43 |
| 15 | 32 | 36 | 32 | 1,510 | 657 | 1,880 | 384 | 288 | 112 | 84 | 59 | 43 |
| 16 | 32 | 35 | 32 | 525 | 572 | 1,840 | 394 | 288 | 112 | 84 | 58 | 41 |
| 17 | 31 | 34 | 32 | 222 | 495 | 1,630 | 399 | 288 | 113 | 84 | 56 | 41 |
| 18 | 30 | 34 | 33 | 152 | 425 | 1,590 | 424 | 289 | 113 | 84 | 56 | 41 |
| 19 | 27 | 34 | 34 | 125 | 365 | 1,490 | 449 | 240 | 113 | 84 | 54 | 40 |
| 20 | 26 | 32 | 36 | 114 | 310 | 1,340 | 398 | 240 | 113 | 84 | 54 | 40 |
| 21 | 26 | 32 | 35 | 104 | 308 | 1,270 | 423 | 334 | 113 | 84 | 54 | 41 |
| 22 | 26 | 32 | 33 | 96 | 260 | 1,090 | 418 | 239 | 113 | 84 | 54 | 41 |
| 23 | 25 | 32 | 33 | 90 | 260 | 1,030 | 418 | 240 | 112 | 84 | 52 | 42 |
| 24 | 24 | 31 | 35 | 85 | 215 | 909 | 412 | 200 | 99 | 79 | 52 | 42 |
| 25 | 24 | 31 | 35 | 1,140 | 215 | 919 | 412 | 200 | 99 | 79 | 51 | 42 |
| 26 | 25 | 34 | 34 | 615 | 215 | 802 | 407 | 200 | 99 | 75 | 52 | 42 |
| 27 | 25 | 34 | 34 | 386 | 310 | 811 | 406 | 200 | 99 | 75 | 52 | 42 |
| 28 | 24 | 33 | 33 | 327 | 310 | 711 | 402 | 200 | 99 | 71 | 51 | 42 |
| 29 | 24 | 33 | 33 | 5,260 | ....... | 721 | 321 | 200 | 99 | 71 | 50 | 113 |
| 30 | 27 | 33 | 32 | 1,750 | ....... | 630 | 320 | 200 | 99 | 71 | 49 | 94 |
| 31 | 27 | ....... | 33 | 4,220 | ....... | 638 | ....... | 200 | ....... | 71 | 46 | ....... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 74 | 49 | 44 | 48 | 42 | 40 | 120 | 271 | 118 |
| 2 | 70 | 49 | 43 | 53 | 42 | 42 | 120 | 275 | 118 |
| 3 | 66 | 45 | 43 | 49 | 41 | 39 | 120 | 227 | 105 |
| 4 | 60 | 45 | 44 | 48 | 41 | 156 | 120 | 237 | 103 |
| 5 | 56 | 46 | 45 | 49 | 41 | 362 | 120 | 203 | 105 |
| 6 | 55 | 47 | 50 | 49 | 40 | 1,240 | 120 | 205 | 105 |
| 7 | 52 | 47 | 56 | 48 | 40 | 381 | 115 | 191 | 96 |
| 8 | 51 | 46 | 49 | 48 | 40 | 164 | 115 | 274 | 96 |
| 9 | 52 | 47 | 47 | 47 | 41 | 124 | 244 | 228 | 96 |
| 10 | 51 | 49 | 46 | 47 | 40 | 3,020 | 244 | 204 | 89 |
| 11 | 51 | 52 | 46 | 48 | 40 | 825 | 723 | 204 | 89 |
| 12 | 50 | 51 | 45 | 48 | 40 | 435 | 490 | 204 | 89 |
| 13 | 48 | 50 | 45 | 47 | 40 | 735 | 320 | 204 | 80 |
| 14 | 47 | 50 | 46 | 47 | 40 | 455 | 395 | 175 | 77 |
| 15 | 45 | 49 | 46 | 45 | 38 | 465 | 395 | 175 | 77 |
| 16 | 44 | 50 | 46 | 45 | 38 | 395 | 395 | 175 | 77 |
| 17 | 45 | 47 | 48 | 45 | 39 | 335 | 395 | 153 | 77 |
| 18 | 45 | 46 | 48 | 45 | 38 | 280 | 389 | 153 | 77 |
| 19 | 45 | 47 | 47 | 45 | 38 | 280 | 384 | 153 | 76 |
| 20 | 44 | 47 | 47 | 45 | 36 | 240 | 458 | 153 | 75 |
| 21 | 44 | 47 | 47 | 44 | 36 | 173 | 355 | 153 | 72 |
| 22 | 44 | 47 | 45 | 44 | 38 | 170 | 355 | 134 | 72 |
| 23 | 44 | 47 | 46 | 42 | 37 | 145 | 355 | 134 | 73 |
| 24 | 44 | 46 | 45 | 42 | 36 | 145 | 355 | 134 | 75 |
| 25 | 44 | 46 | 45 | 42 | 37 | 145 | 355 | 134 | 71 |
| 26 | 45 | 43 | 45 | 42 | 37 | 140 | 355 | 134 | 69 |
| 27 | 53 | 44 | 46 | 44 | 37 | 140 | 304 | 118 | 67 |
| 28 | 55 | 44 | 47 | 44 | 37 | 140 | 317 | 118 | 66 |
| 29 | 53 | 44 | 54 | 42 | 35 | 140 | 261 | 118 | 63 |
| 30 | 53 | 44 | 56 | 41 | ....... | 135 | 268 | 118 | 63 |
| 31 | 51 | ....... | 48 | 42 | ....... | 120 | ....... | 118 | ....... |

NOTE.—Additional water is diverted above the station during irrigating season. From May 13 to July 28, 1909, this additional water is included in the above values.

*Monthly discharge of San Gabriel River and canals near Azusa, Cal., for 1894–1912.*

[Drainage area, 222 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1894.** | | | | | | | |
| May | 50 | 27 | 32 | 0.14 | 0.16 | 1,968 | |
| June | 27 | 17 | 23 | .10 | .11 | 1,369 | |
| July | 17 | 9 | 12 | .05 | .06 | 738 | |
| August | 27 | 10 | 14 | .06 | .07 | 861 | |
| September | 23 | 13 | 15 | .07 | .08 | 893 | |
| **1894-5.** | | | | | | | |
| October | 16 | 13 | 14 | .06 | .07 | 861 | |
| November 1-15 | 14 | 13 | 13 | .06 | .03 | 387 | |
| August 8-31 | 47 | 38 | 42 | .19 | .17 | 1,999 | |
| September | 39 | 29 | 32 | .14 | .16 | 1,904 | |
| **1895-6.** | | | | | | | |
| October | 32 | 27 | 29 | .13 | .15 | 1,783 | |
| November | 50 | 29 | 40 | .18 | .20 | 2,380 | |
| December | 45 | 37 | 42 | .19 | .22 | 2,582 | |
| January | 51 | 26 | 37 | .17 | .20 | 2,275 | |
| February | 61 | 36 | 41 | .18 | .19 | 2,358 | |
| March | 169 | 37 | 111 | .50 | .58 | 6,825 | |
| April | 91 | 40 | 54 | .24 | .27 | 3,213 | |
| May | 40 | 29 | 36 | .16 | .18 | 2,214 | |
| June | 27 | 13 | 19 | .09 | .10 | 1,131 | |
| July | 15 | 9 | 12 | .05 | .06 | 738 | |
| August | 36 | 9 | 14 | .06 | .07 | 861 | |
| September | 19 | 11 | 13 | .06 | .07 | 774 | |
| The year | 169 | 9 | 37.3 | .168 | 2.29 | 27,180 | |
| **1896-7.** | | | | | | | |
| October | 188 | 10 | 24 | .11 | .13 | 1,476 | |
| November | 40 | 15 | 19 | .09 | .10 | 1,131 | |
| December | 37 | 17 | 22 | .10 | .12 | 1,353 | |
| January | 147 | 25 | 57.9 | .260 | .29 | 3,617 | |
| February | 1,713 | 64 | 344.8 | 1.553 | 1.58 | 19,146 | |
| March | 1,765 | 294 | 465.6 | 2.097 | 2.42 | 28,623 | |
| April | 370 | 201 | 294.4 | 1.325 | 1.48 | 17,519 | |
| May | 196 | 94 | 145.0 | .653 | .75 | 8,861 | |
| June | 91 | 54 | 67.8 | .306 | .34 | 4,033 | |
| July | 52 | 27 | 38.1 | .171 | .20 | 2,343 | |
| August | 34 | 22 | 26.4 | .118 | .14 | 1,613 | |
| September | 23 | 18 | 20.7 | .088 | .10 | 1,226 | |
| The year | 1,765 | 10 | 127 | .572 | 7.65 | 90,980 | |
| **1897-8.** | | | | | | | |
| October | 1,640 | 22 | 90.5 | 0.408 | .46 | 5,564 | |
| November | 34 | 31 | 33.3 | .141 | .15 | 1,980 | |
| December | 34 | 28 | 30.5 | .137 | .16 | 1,875 | |
| January | 63 | 28 | 40 | .18 | .20 | 2,453 | |
| February | 70 | 32 | 40 | .18 | .19 | 2,241 | |
| March | 48 | 28 | 35 | .16 | .18 | 2,131 | |
| April | 37 | 25.3 | 33 | .15 | .17 | 1,960 | |
| May | 83 | 25.0 | 36 | .16 | .19 | 2,213 | |
| June | 30 | 14.5 | 19 | .09 | .10 | 1,159 | |
| July | 14 | 9.0 | 11 | .05 | .06 | 672 | |
| August | 9 | 5.0 | 7 | .03 | .04 | 456 | |
| September | 10 | 6.1 | 8 | .04 | .04 | 467 | |
| The year | 1,640 | 5 | 31.9 | .144 | 1.94 | 23,090 | |
| **1898-9.** | | | | | | | |
| October | 10 | 7.5 | 9 | .04 | .05 | 533 | |
| November | 11 | 8.0 | 10 | .04 | .05 | 580 | |
| December | 18 | 11.7 | 14 | .06 | .07 | 882 | |
| January | 33 | 15 | 23 | .104 | .12 | 1,414 | |
| February | 28 | 20 | 22 | .102 | .11 | 1,244 | |
| March | 40 | 18 | 26 | .119 | .14 | 1,628 | |
| April | 28 | 16 | 21 | .096 | .11 | 1,262 | |
| May | 17 | 12 | 14 | .062 | .07 | 842 | |
| June | 22 | 5 | 10 | .043 | .05 | 565 | |
| July | 4 | 3 | 4 | .016 | .02 | 221 | |
| August | 6 | 4 | 5 | .022 | .02 | 295 | |
| September | 6 | 3 | 4 | .018 | .02 | 220 | |
| The year | 40 | 3 | 13.5 | .061 | .83 | 9,680 | |

*Monthly discharge of San Gabriel River and canals near Azusa, Cal., for 1894–1912*—Con.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1899–1900.** | | | | | | | |
| October | 26 | 4 | 11 | 0.050 | 0.06 | 683 | |
| November | 24 | 10 | 14 | .064 | .07 | 847 | |
| December | 39 | 16 | 20 | .091 | .10 | 1,247 | |
| January | 89 | 22 | 32 | .14 | .16 | 1,968 | |
| February | 23 | 18 | 20 | .09 | .09 | 1,111 | |
| March | 30 | 16 | 20 | .09 | .10 | 1,230 | |
| April | 26 | 13 | 17 | .08 | .09 | 1,012 | |
| May | 86 | 16 | 37 | .17 | .20 | 2,275 | |
| June | 22 | 8 | 15 | .07 | .08 | 893 | |
| July | 10 | 4 | 6 | .03 | .03 | 369 | |
| August | 5 | 4 | 4 | .02 | .02 | 246 | |
| September | 6 | 3 | 4 | .02 | .02 | 238 | |
| The year | 89 | 3 | 16.7 | .075 | 1.02 | 12,100 | |
| **1900–1901.** | | | | | | | |
| October | 6 | 4 | 5 | .02 | .02 | 307 | |
| November | ........ | ........ | 186 | .84 | .93 | 11,068 | |
| December | ........ | ........ | 40 | .18 | .11 | 1,269 | |
| January | 1,450 | 28 | 169 | .76 | .87 | 10,391 | |
| February | 2,605 | 137 | 680 | 3.06 | 3.19 | 37,765 | |
| March | 440 | 135 | 221 | 1.00 | 1.15 | 13,589 | |
| April | 130 | 95 | 110 | .50 | .56 | 6,545 | |
| May | 272 | 83 | 121 | .55 | .63 | 7,440 | |
| June | 93 | 41 | 63 | .28 | .31 | 3,749 | |
| July | 41 | 24 | 30 | .14 | .16 | 1,845 | |
| August | 27 | 15 | 20 | .09 | .10 | 1,240 | |
| September | 20 | 15 | 17 | .08 | .09 | 1,012 | |
| The year | 2,605 | 4 | 138 | .624 | 8.12 | 96,200 | |
| **1901–2.** | | | | | | | |
| October | 122 | 0 | 24 | .11 | .13 | 1,476 | |
| November | 50 | 29 | 32 | .14 | .16 | 1,904 | |
| December | 30 | 26 | 27 | .12 | .14 | 1,660 | |
| January | 51 | 24 | 28 | .13 | .15 | 1,722 | |
| February | 120 | 38 | 37 | .17 | .18 | 2,055 | |
| March | 378 | 63 | 99 | .45 | .52 | 6,088 | |
| April | 99 | 48 | 66 | .30 | .33 | 3,928 | |
| May | 48 | 30 | 39 | .18 | .21 | 2,398 | |
| June | 30 | 14 | 20 | .09 | .10 | 1,190 | |
| July | 17 | 8 | 11 | .05 | .06 | 676 | |
| August | 8 | 6 | 7 | .03 | .03 | 430 | |
| September | 6 | 4 | 5 | .02 | .02 | 298 | |
| The year | 378 | 0 | 32.9 | .149 | 2.03 | 23,800 | |
| **1902–3.** | | | | | | | |
| October | 10 | 6 | 7 | .03 | .03 | 430 | |
| November | 80 | 8 | 19 | .09 | .10 | 1,131 | |
| December | 68 | 16 | 32 | .14 | .16 | 1,968 | |
| January | 2,999 | 22 | 148 | .67 | .77 | 9,100 | |
| February | 203 | 61 | 102 | .46 | .48 | 5,665 | |
| March | 1,417 | 57 | 257 | 1.16 | 1.34 | 15,802 | |
| April | 5,892 | 267 | 792 | 3.57 | 3.98 | 47,127 | |
| May | 355 | 125 | 217 | .98 | 1.13 | 13,343 | |
| June | 125 | 62 | 95 | .43 | .48 | 5,653 | |
| July | 58 | 35 | 43 | .19 | .22 | 2,644 | |
| August | 35 | 24 | 29 | .13 | .15 | 1,783 | |
| September | 34 | 21 | 25 | .11 | .12 | 1,488 | |
| The year | 5,892 | 6 | 147 | .663 | 8.96 | 106,000 | |

[illegible]

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| [illegible] | [illegible] | | | | | [illegible] |
|---|---|---|---|---|---|---|
| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
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| [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
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| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Monthly discharge of San Gabriel River and canals near Azusa, Cal., for 1894–1912*—Con.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1907-8.** | | | | | | | |
| ctober | 100 | 50 | 66.5 | 0.300 | 0.35 | 4,090 | B. |
| ovember | 79 | 56 | 63.9 | .288 | .32 | 3,800 | B. |
| ecember | 76 | 53 | 58.6 | .264 | .30 | 3,600 | B. |
| nuary | 1,240 | 48 | 180 | .811 | .94 | 11,100 | C. |
| ebruary | 766 | 181 | 260 | 1.17 | 1.26 | 15,000 | C. |
| arch | 278 | 132 | 207 | .932 | 1.07 | 12,700 | C. |
| pril | 225 | 132 | 156 | .703 | .78 | 9,280 | C. |
| ay | 163 | 82 | 117 | .527 | .61 | 7,190 | C. |
| me | 82 | 49 | 70.4 | .317 | .35 | 4,190 | C. |
| ly | 89 | 34 | 41.6 | .187 | .22 | 2,560 | C. |
| ugust | 60 | 25 | 36.0 | .162 | .19 | 2,210 | C. |
| eptember | 62 | 26 | 30.6 | .138 | .15 | 1,820 | C. |
| The year | 1,240 | 26 | 107 | .482 | 6.54 | 77,500 | |
| **1908-9.** | | | | | | | |
| ctober | 40 | 29 | 33.6 | .151 | .17 | 2,070 | C. |
| ovember | 36 | 31 | 32.9 | .148 | .17 | 1,960 | C. |
| ecember | 80 | 34 | 46.7 | .210 | .24 | 2,870 | C. |
| nuary | 4,080 | 39 | 414 | 1.86 | 2.14 | 25,500 | |
| ebruary | 7,100 | 308 | 1,070 | 4.82 | 5.02 | 59,400 | |
| arch | 1,500 | 209 | 428 | 1.93 | 2.22 | 26,300 | |
| pril | 710 | 309 | 471 | 2.12 | 2.36 | 28,000 | |
| ay | 309 | 162 | 248 | 1.12 | 1.29 | 15,200 | |
| me | 173 | 111 | 144 | .649 | .72 | 8,570 | |
| ly | 109 | 61 | 82.0 | .369 | .43 | 5,040 | |
| ugust | 59 | 42 | 50.7 | .228 | .26 | 3,120 | |
| eptember | 52 | 35 | 39.0 | .176 | .20 | 2,320 | |
| The year | 7,100 | 29 | 255 | 1.15 | 15.22 | 180,000 | |
| **1909-10.** | | | | | | | |
| ctober | 50 | 34 | 37.5 | .169 | .19 | 2,310 | |
| ovember | 92 | 34 | 48.4 | .218 | .24 | 2,880 | |
| ecember | 5,690 | 53 | 340 | 1.53 | 1.76 | 20,900 | |
| anuary | 12,500 | 269 | 1,130 | 5.09 | 5.87 | 69,500 | |
| ebruary | 322 | 151 | 207 | .932 | .97 | 11,500 | |
| arch | 249 | 136 | 156 | .703 | .81 | 9,590 | |
| pril | 170 | 102 | 139 | .626 | .70 | 8,270 | |
| ay | 102 | 68 | 82.1 | .370 | .43 | 5,050 | |
| une | 68 | 49 | 59.8 | .269 | .30 | 3,560 | |
| uly | 50 | 34 | 39.9 | .180 | .21 | 2,450 | |
| ugust | 33 | 25 | 27.8 | .125 | .14 | 1,710 | |
| eptember | 25 | 21 | 23.1 | .104 | .12 | 1,370 | |
| The year | 12,500 | 21 | 191 | .860 | 11.74 | 139,000 | |
| **1910-11.** | | | | | | | |
| ctober | 32 | 22 | 25.4 | .114 | .13 | 1,560 | |
| ovember | 39 | 26 | 31.4 | .141 | .16 | 1,870 | |
| ecember | 36 | 31 | 32.8 | .148 | .17 | 2,020 | |
| anuary | 5,260 | 32 | 605 | 2.73 | 3.15 | 37,200 | |
| ebruary | 3,250 | 215 | 797 | 3.59 | 3.74 | 44,300 | |
| arch | 9,160 | 310 | 1,980 | 8.92 | 10.28 | 122,000 | |
| pril | 763 | 320 | 474 | 2.14 | 2.39 | 28,200 | |
| ay | 400 | 200 | 270 | 1.22 | 1.41 | 16,600 | |
| une | 200 | 99 | 126 | .568 | .63 | 7,500 | |
| uly | 100 | 71 | 85.1 | .383 | .44 | 5,230 | |
| ugust | 69 | 46 | 58.7 | .264 | .30 | 3,610 | |
| eptember | 113 | 40 | 47.6 | .214 | .24 | 2,830 | |
| The year | 9,160 | 22 | 378 | 1.70 | 23.04 | 273,000 | |
| **1911-12.** | | | | | | | |
| ctober | 74 | 44 | 51.0 | .230 | .27 | 3,140 | |
| ovember | 52 | 43 | 47.0 | .212 | .24 | 2,900 | |
| ecember | 56 | 43 | 46.7 | .210 | .24 | 2,870 | |
| anuary | 53 | 41 | 45.6 | .205 | .24 | 2,800 | |
| ebruary | 42 | 35 | 38.8 | .175 | .19 | 2,230 | |
| March | 3,020 | 39 | 374 | 1.68 | 1.94 | 23,000 | |
| April | 723 | 115 | 302 | 1.36 | 1.52 | 18,000 | |
| May | 275 | 118 | 177 | .797 | .92 | 10,900 | |
| June | 118 | 63 | 83.9 | .378 | .42 | 4,990 | |
| The period | | | | | | 70,700 | |

## CREEKS, CANALS, AND MISCELLANEOUS WATER SUPPLIES IN SAN GABRIEL RIVER BASIN.

The following tables are prepared from measurements made three times daily for the San Gabriel Electric Co. and filed in a suit before the United States land office at Los Angeles, Cal. The mean of the three daily measurements is here given.

*Daily discharge, in second-feet, over weir on the west branch of North Fork of San Gabriel River, Cal., for 1900.*

| Day | July. | Aug. | Sept. | Oct. | Day. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ........ | 0.23 | 0.19 | 0.20 | 21 | 0.30 | 0.22 | 0.15 | ........ |
| 2 | 0.25 | .23 | .19 | .12 | 22 | .34 | .22 | .12 | ........ |
| 3 | .27 | .23 | .17 | .18 | 23 | .26 | .22 | .15 | ........ |
| 4 | .27 | .26 | .22 | .26 | 24 | .26 | .22 | .22 | ........ |
| 5 | .26 | .17 | .12 | .23 | 25 | .26 | .22 | .27 | ........ |
| 6 | .28 | .28 | .12 | .23 | 26 | .37 | .23 | .26 | ........ |
| 7 | .24 | .23 | .22 | .19 | 27 | .37 | .18 | .26 | ........ |
| 8 | .23 | .22 | .18 | .19 | 28 | .26 | .18 | .22 | ........ |
| 9 | .25 | .12 | .20 | .19 | 29 | .23 | .25 | .20 | ........ |
| 10 | .23 | .12 | .22 | .19 | 30 | .23 | .20 | .17 | ........ |
| 11 | .25 | .19 | .22 | .19 | 31 | .23 | ........ | ........ | ........ |
| 12 | .35 | .19 | .22 | .19 | Mean | .26 | .21 | .19 | .19 |
| 13 | .32 | .19 | .22 | .22 | | | | | |
| 14 | .27 | .19 | .18 | ........ | | | | | |
| 15 | .27 | .15 | .18 | ........ | | | | | |
| 16 | .31 | .26 | .12 | ........ | | | | | |
| 17 | .31 | .23 | .12 | ........ | | | | | |
| 18 | .27 | .23 | .25 | ........ | | | | | |
| 19 | .31 | .23 | .15 | ........ | | | | | |
| 20 | .30 | .22 | .12 | ........ | | | | | |

*Daily discharge, in second-feet, over weir on the north branch of North Fork of San Gabriel River, Cal., for 1900.*

| Day. | July. | Aug. | Sept. | Oct. | Day. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ........ | 0.90 | 0.62 | 0.65 | 21 | 0.97 | 0.60 | 0.53 | ........ |
| 2 | 0.92 | .90 | .62 | .73 | 22 | .96 | ........ | .53 | ........ |
| 3 | .92 | .90 | .62 | .68 | 23 | 1.07 | .55 | .53 | ........ |
| 4 | .92 | .96 | .62 | .68 | 24 | .95 | .52 | .81 | ........ |
| 5 | .90 | .96 | .60 | .68 | 25 | .95 | .52 | .68 | ........ |
| 6 | .90 | .74 | .65 | .60 | 26 | .96 | .56 | .65 | ........ |
| 7 | .99 | .74 | .61 | .56 | 27 | .65 | .57 | .65 | ........ |
| 8 | .82 | .74 | .61 | .56 | 28 | .68 | .57 | .66 | ........ |
| 9 | .80 | .77 | .83 | .56 | 29 | .89 | .57 | .66 | ........ |
| 10 | .70 | .77 | .61 | .57 | 30 | .86 | .74 | .68 | ........ |
| 11 | .81 | .74 | .61 | .59 | 31 | .68 | ........ | ........ | ........ |
| 12 | .83 | .74 | .63 | .59 | Mean | .89 | .70 | .63 | .62 |
| 13 | .86 | .77 | .61 | .59 | | | | | |
| 14 | .96 | .68 | .63 | ........ | | | | | |
| 15 | .97 | .74 | .63 | ........ | | | | | |
| 16 | .97 | .62 | .59 | ........ | | | | | |
| 17 | .97 | .65 | .59 | ........ | | | | | |
| 18 | .97 | .65 | .59 | ........ | | | | | |
| 19 | .97 | .62 | .59 | ........ | | | | | |
| 20 | .97 | .60 | .59 | ........ | | | | | |

*Daily discharge, in second-feet, over weir on West Fork of San Gabriel River, Cal., above North Fork, for 1900.*

| Day. | July. | Aug. | Sept. | Oct. | Day. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.55 | 0.05 | 0.12 | 0.16 | 21 | 0.07 | 0.12 | 0.16 | ........ |
| 2 | .62 | .02 | .12 | .16 | 22 | .12 | .10 | .16 | ........ |
| 3 | .68 | ........ | .12 | .16 | 23 | ........ | .07 | ........ | ........ |
| 4 | .62 | ........ | .12 | .16 | 24 | ........ | .08 | ........ | ........ |
| 5 | .53 | ........ | .08 | .15 | 25 | .08 | .08 | .12 | ........ |
| 6 | .55 | ........ | .11 | .20 | 26 | ........ | ........ | .20 | ........ |
| 7 | .55 | ........ | .16 | .20 | 27 | ........ | .08 | .16 | ........ |
| 8 | .55 | ........ | .12 | .16 | 28 | .05 | .08 | .16 | ........ |
| 9 | .44 | ........ | .12 | .16 | 29 | .08 | .10 | .13 | ........ |
| 10 | .34 | ........ | .16 | .13 | 30 | .05 | .12 | .14 | ........ |
| 11 | .29 | ........ | .16 | .20 | 31 | .05 | .10 | ........ | ........ |
| 12 | .26 | .08 | .12 | .20 | Mean | .29 | .09 | .14 | .17 |
| 13 | .24 | .07 | .12 | .20 | | | | | |
| 14 | .20 | .08 | .16 | ........ | | | | | |
| 15 | .13 | .08 | .16 | ........ | | | | | |
| 16 | .12 | .12 | .16 | ........ | | | | | |
| 17 | .16 | .10 | .16 | ........ | | | | | |
| 18 | .16 | .12 | .11 | ........ | | | | | |
| 19 | .12 | .10 | .12 | ........ | | | | | |
| 20 | .12 | .12 | .12 | ........ | | | | | |

*Daily discharge, in second-feet, over weir on Coldwater Creek, Cal., 2½ miles from mouth, for 1900.*

| Day. | July. | Aug. | Sept. | Oct. | Day. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | ........ | 0.43 | 0.52 | ........ | 21 | ........ | 0.56 | ........ | ........ |
| 2 | ........ | ........ | .58 | 0.60 | 22 | ........ | .51 | ........ | ........ |
| 3 | ........ | .49 | .62 | .62 | 23 | ........ | .49 | ........ | ........ |
| 4 | ........ | .46 | .57 | .61 | 24 | ........ | .45 | ........ | ........ |
| 5 | ........ | .54 | .55 | .63 | 25 | ........ | .44 | ........ | ........ |
| 6 | ........ | .53 | .56 | .61 | 26 | ........ | .45 | ........ | ........ |
| 7 | ........ | .50 | .51 | .58 | 27 | 0.37 | .42 | ........ | ........ |
| 8 | ........ | .50 | .51 | .58 | 28 | .49 | .42 | ........ | ........ |
| 9 | ........ | .53 | .56 | .58 | 29 | .50 | .41 | ........ | ........ |
| 10 | ........ | .56 | .50 | .55 | 30 | .47 | .40 | ........ | ........ |
| 11 | ........ | .53 | .55 | .60 | 31 | .46 | .56 | ........ | ........ |
| 12 | ........ | .51 | .52 | .60 | Mean | .46 | .48 | .55 | .60 |
| 13 | ........ | .46 | ........ | .64 | | | | | |
| 14 | ........ | .47 | ........ | ........ | | | | | |
| 15 | ........ | .45 | ........ | ........ | | | | | |
| 16 | ........ | .45 | ........ | ........ | | | | | |
| 17 | ........ | .47 | ........ | ........ | | | | | |
| 18 | ........ | .47 | ........ | ........ | | | | | |
| 19 | ........ | .52 | ........ | ........ | | | | | |
| 20 | ........ | .55 | ........ | ........ | | | | | |

... Valley at wells on Lordsburg Mesa, Ca[l.]

| | | | |
|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] |
| | | Richards, 4 wells | |
| | | Sumner | |
| | | Standish Bros | |
| | | La Verne Land & Water Co | |
| | | Stevens | |
| | | ... 5 days in 30 | |
| | | ... Soper | |
| | | Hayes & Stratton | |
| | | ... ace | |
| | | ... art | |
| | | ... & McQuilly | |
| | | ... | |
| | | ... Bros | |
| | | ... (intermittent) south of Mesa Avenue | |
| | | ... on | |
| | | ... | |
| | | ... & Overholtzer | |
| | | Massey, 2 wells | |
| | | Hanser Bros | |
| | | Moorway & Son | |
| | | Snyder | |
| | | Rutherford & Co | |
| | | New Deal Water Co | |
| | | Kiser | |

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the San Gabriel River basin:

*Miscellaneous measurements in San Gabriel River drainage basin.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | Sec.-ft. |
| [illegible] 1898 | [illegible] | F. H. Olmsted | Near mouth of canyon | [illegible] |
| 1900 | [illegible] | ... Bennett | | [illegible] |
| 1903 | [illegible] | W. B. Clapp | Whittier flume crossing | [illegible] |
| 1904 | [illegible] | Do | Do | [illegible] |
| 1905 | [illegible] | Do | Do | [illegible] |
| 1899 | [illegible] | Do | | |
| 1900 | [illegible] | ... Bennett | | [illegible] |
| 1899 | [illegible] | ... Lippincott | | [illegible] |
| 1903 | [illegible] | W. B. Clapp | Heading | [illegible] |
| [illegible] | [illegible] | Do | Do | [illegible] |
| [illegible] | [illegible] | Do | Do | [illegible] |
| 1898 | [illegible] | ... Olmsted | Left of Narrows flume | [illegible] |
| 1900 | [illegible] | ... Bennett | | [illegible] |
| 1898 | [illegible] | ... Olmsted | El Monte road crossing | [illegible] |
| [illegible] | [illegible] | ... Bennett | | [illegible] |
| [illegible] 1903 | [illegible] | W. B. Clapp | Pumping plant east of El Monte, developed water. | [illegible] |
| [illegible] 1898 | Mayberry Canyon | J. B. Lippincott | Alhambra and Mayberry water. | [illegible] |
| [illegible] 1899 | Do | Do | Alhambra water | |
| June [illegible] | San [illegible] | | 100 feet above U. S. G. S. gaging station on San Gabriel River near Azusa. | [illegible] |
| June [illegible] | [illegible] | | Do | [illegible] |
| Jan. [illegible] 1902 | [illegible] | | 1,000 feet below power house at Azusa. | [illegible] |
| Do | [illegible] | | 1 mile below tailrace of Pacific Light & Power Co.'s power house. | [illegible] |
| [illegible] | San Gabriel River | J. B. Lippincott | Mouth of Vineland tunnel. | [illegible] |
| | | Do | Same; pump running. | [illegible] |
| | | Do | Mouth of Vineland tunnel. | [illegible] |
| | Do | Do | Same; shaft No. 2 | [illegible] |

*Miscellaneous measurements in San Gabriel River drainage basin*—Continued.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Apr. 29, 1897 | San Gabriel River | J. B. Lippincott | Mouth of Vineland tunnel, at head of flume, between shafts Nos. 3 and 4. | 2.13 |
| Do | ....do | ....do | Same; right fork, above shaft No. 4. | 1.07 |
| May 24, 1897 | ....do | ....do | Mouth of Vineland tunnel. | 1.88 |
| June 17, 1896 | ....do | ....do | Azusa irrigators' development tunnel. | 3.99 |
| Aug. 24, 1898 | ....do | ....do | Same place; river being diverted through power company's conduit. | .22 |
| Do | ....do | ....do | Irrigators' development tunnel, pumped; additional. | .30 |
| Aug. 23, 1898 | ....do | ....do | Junction of East and West forks. | 9.87 |
| Do | ....do | ....do | Head works of San Gabriel Power Co. | 8.42 |
| July 3, 1898 | ....do | F. H. Olmsted | Original river channel | 6.18 |
| Do | ....do | ....do | Channel No. 2; Baldwin ranch house road. | 8.79 |
| Do | ....do | ....do | Channel No. 3; Campers station. | 3.36 |
| Apr. 15, 1903 | ....do | W. B. Clapp | El Monte Bridge | 50 |
| Apr. 26, 1903 | ....do | O. W. Peterson | ....do | 2.29 |
| May 26, 1903 | ....do | W. B. Clapp | ....do | 0 |
| Apr. 13, 1905 | ....do | R. S. Hawley | ....do | 47 |
| Apr. 15, 1903 | ....do | W. B. Clapp | Lexington wash at El Monte. | 3 |
| May 26, 1903 | ....do | ....do | Total at head of Lexington wash. | 66 |
| Apr. 14, 1903 | ....do | ....do | Upper road crossing, Duarte to Azusa. | 264 |
| Apr. 23, 1903 | ....do | O. W. Peterson | Opposite Alamitos | 311 |
| Apr. 24, 1903 | ....do | ....do | Southern California Ry. at Rivera. | 365 |
| Do | ....do | ....do | Southern California Ry. at Studebaker. | 364 |
| Dec. 5, 1897 | ....do | J. B. Lippincott | Whittier road crossing | 106 |
| Apr. 25, 1903 | ....do | O. W. Peterson | ....do | 361 |
| Do | ....do | ....do | Road crossing east of Durfee's ranch. | 264 |
| Aug. 23, 1898 | San Gabriel River, East Fork. | J. B. Lippincott | Above junction with West Fork. | 7.11 |
| Do | San Gabriel River, West Fork. | ....do | Above junction with East Fork. | 2.67 |
| June 20, 1910 | ....do | | 100 feet above junction with North Fork. | 8.5 |
| Do | San Gabriel River, North Fork of West Fork. | | 500 feet above mouth | 7.2 |
| July 3, 1898 | Rio Hondo | F. H. Olmsted | Old Mission Bridge | 29.8 |
| Aug. 8, 1900 | ....do | S. G. Bennett | ....do | 23.3 |
| July 15, 1902 | ....do | J. B. Lippincott | ....do | 23.8 |
| Aug. 18, 1902 | ....do | J. A. Worthen | ....do | 24.3 |
| Sept. 8, 1902 | ....do | ....do | ....do | 25.6 |
| Sept. 27, 1902 | ....do | ....do | ....do | 21.5 |
| Oct. 11, 1902 | ....do | ....do | ....do | 24.7 |
| Apr. 27, 1903 | ....do | O. W. Peterson | ....do | 36 |
| Oct. 2, 1903 | ....do | W. B. Clapp | ....do | 29 |
| June 15, 1904 | ....do | J. A. Worthen | ....do | 22 |
| July 8, 1904 | ....do | ....do | ....do | 24.1 |
| Aug. 31, 1904 | ....do | ....do | ....do | 22.2 |
| Sept. 24, 1904 | ....do | ....do | ....do | 21.7 |
| Oct. 5, 1904 | ....do | W. B. Clapp | ....do | 22 |
| Oct. 15, 1904 | ....do | J. A. Worthen | ....do | 27 |
| Oct. 6, 1905 | ....do | W. B. Clapp | ....do | 21 |
| Apr. 20, 1903 | ....do | O. W. Peterson | San Pedro, Los Angeles & Salt Lake Ry. above Workman. | 29 |
| Apr. 27, 1903 | ....do | ....do | Whittier road crossing | 17 |
| Do | ....do | ....do | Road crossing west of Rivera. | 12 |
| Do | ....do | ....do | Southern Pacific R. R. west of Downey. | 12 |
| Aug. 8, 1900 | Agricultural ditch | S. G. Bennett | | .0 |
| Do | Arroyo ditch | ....do | | 21.1 |
| July 25, 1902 | ....do | J. A. Worthen | Dam | 21.7 |
| June 15, 1904 | ....do | ....do | ....do | |
| July 8, 1904 | ....do | ....do | ....do | |
| Aug. 31, 1904 | ....do | ....do | ....do | |

*Daily discharge, in second-feet, [illegible] for [illegible].*

| Day | July. | Aug. | Sept. | Oct. | Day. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | [illegible] | | | [illegible] | 21 | [illegible] | [illegible] | [illegible] | |
| 2 | [illegible] | | | [illegible] | 22 | [illegible] | [illegible] | [illegible] | |
| 3 | [illegible] | [illegible] | | [illegible] | 23 | [illegible] | [illegible] | [illegible] | |
| 4 | [illegible] | [illegible] | | [illegible] | 24 | [illegible] | [illegible] | [illegible] | |
| 5 | [illegible] | [illegible] | | [illegible] | 25 | [illegible] | [illegible] | [illegible] | |
| 6 | [illegible] | [illegible] | | [illegible] | 26 | [illegible] | [illegible] | [illegible] | |
| 7 | [illegible] | [illegible] | | [illegible] | 27 | [illegible] | [illegible] | [illegible] | |
| 8 | [illegible] | [illegible] | | [illegible] | 28 | [illegible] | [illegible] | [illegible] | |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | 29 | [illegible] | [illegible] | [illegible] | |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | 30 | [illegible] | [illegible] | [illegible] | |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | 31 | [illegible] | [illegible] | | |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | Mean | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 14 | [illegible] | [illegible] | [illegible] | | | | | | |
| 15 | [illegible] | [illegible] | [illegible] | | | | | | |
| 16 | [illegible] | [illegible] | [illegible] | | | | | | |
| 17 | [illegible] | [illegible] | [illegible] | | | | | | |
| 18 | [illegible] | [illegible] | [illegible] | | | | | | |
| 19 | [illegible] | [illegible] | [illegible] | | | | | | |
| 20 | [illegible] | [illegible] | [illegible] | | | | | | |

*Daily discharge, in second-feet, [illegible] Fish Fork of San [illegible] River [illegible] yards from mouth, for [illegible].*

| Day. | July. | Aug. | Sept. | Oct. | Day. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.42 | | | [illegible] | 21 | [illegible] | [illegible] | [illegible] | |
| 2 | [illegible] | | | [illegible] | 22 | [illegible] | [illegible] | [illegible] | |
| 3 | [illegible] | [illegible] | | [illegible] | 23 | [illegible] | [illegible] | [illegible] | |
| 4 | [illegible] | [illegible] | | [illegible] | 24 | [illegible] | [illegible] | [illegible] | |
| 5 | [illegible] | [illegible] | | [illegible] | 25 | [illegible] | [illegible] | [illegible] | |
| 6 | [illegible] | [illegible] | | [illegible] | 26 | [illegible] | [illegible] | [illegible] | |
| 7 | [illegible] | [illegible] | | [illegible] | 27 | [illegible] | [illegible] | [illegible] | |
| 8 | [illegible] | [illegible] | | [illegible] | 28 | [illegible] | [illegible] | [illegible] | |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | 29 | [illegible] | [illegible] | [illegible] | |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | 30 | [illegible] | [illegible] | [illegible] | |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | 31 | | [illegible] | | |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | Mean | 1.11 | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 14 | [illegible] | [illegible] | [illegible] | | | | | | |
| 15 | 1.42 | [illegible] | [illegible] | | | | | | |
| 16 | 1.25 | [illegible] | [illegible] | | | | | | |
| 17 | [illegible] | [illegible] | [illegible] | | | | | | |
| 18 | [illegible] | [illegible] | [illegible] | | | | | | |
| 19 | [illegible] | [illegible] | [illegible] | | | | | | |
| 20 | [illegible] | [illegible] | [illegible] | | | | | | |

*Daily discharge, in second-feet, over weir on Iron Fork of San Gabriel River, Cal., 100 yards from mouth, for 1900.*

| Day. | July. | Aug. | Sept. | Oct. | Day. | July. | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.97 | ........ | ........ | 1.06 | 21 | 1.31 | 1.12 | 0.91 | ........ |
| 2 | 1.97 | 0.87 | ........ | 1.08 | 22 | 1.34 | 1.12 | .87 | ........ |
| 3 | 2.03 | 1.06 | ........ | 1.06 | 23 | 1.37 | 1.02 | 1.12 | ........ |
| 4 | 2.09 | 1.09 | ........ | 1.12 | 24 | 1.34 | 1.02 | 1.27 | ........ |
| 5 | 1.89 | 1.16 | ........ | 1.20 | 25 | 1.29 | .95 | 1.20 | ........ |
| 6 | 1.91 | 1.16 | ........ | 1.12 | 26 | 1.24 | .95 | 1.20 | ........ |
| 7 | 1.83 | .62 | ........ | 1.09 | 27 | 1.26 | .95 | 1.06 | ........ |
| 8 | 1.66 | 1.16 | ........ | 1.16 | 28 | 1.21 | 1.02 | 1.01 | ........ |
| 9 | 1.55 | 1.12 | 1.09 | 1.12 | 29 | 1.09 | 1.09 | 1.01 | ........ |
| 10 | 1.58 | 1.16 | 1.12 | 1.09 | 30 | 1.14 | 1.09 | 1.16 | ........ |
| 11 | 1.50 | 1.24 | 1.12 | 1.20 | 31 | 1.24 | 1.12 | ........ | ........ |
| 12 | 1.39 | 1.08 | 1.09 | 1.20 | Mean | 1.50 | 1.07 | 1.09 | 1.14 |
| 13 | 1.42 | 1.09 | 1.09 | 1.23 | | | | | |
| 14 | 1.42 | 1.20 | 1.12 | 1.31 | | | | | |
| 15 | 1.44 | 1.24 | 1.16 | ........ | | | | | |
| 16 | 1.42 | 1.12 | 1.09 | ........ | | | | | |
| 17 | 1.42 | 1.12 | 1.16 | ........ | | | | | |
| 18 | 1.37 | 1.09 | 1.09 | ........ | | | | | |
| 19 | 1.37 | 1.09 | 1.09 | ........ | | | | | |
| 20 | 1.42 | 1.16 | 1.06 | ........ | | | | | |

*Discharge measurements of miscellaneous water supplies at points in San Gabriel Valley.*

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| 1900. | | | *Sec.-feet.* |
| Sept. 17 | W. W. Cockins | Bradbury ranch, Santa Anita, and Rose avenues | 1.44 |
| 17 | do | San Gabriel Sanitarium tunnel | .04 |
| 18 | do | W. A. Highland, Rose avenue, Lamanda Park | .10 |
| 19 | do | Chapman ranch, 2 wells pumped; 1 artesian well | 1.01 |
| 19 | do | Chapman ranch, 4 wells pumped | 1.90 |
| 20 | do | Chapman ranch, natural flow of ciénaga | .07 |
| 20 | do | Chapman ranch dairy | .72 |
| | | Chapman ranch, total | 3.70 |
| 20 | do | Alhambra Water Co., weir No. 1 | 2.58 |
| 20 | do | Alhambra Water Co., weir No. 2 | .34 |
| | | Total | 2.92 |
| 24 | do | Santa Anita Canyon, natural flow | .22 |
| 24 | do | Sierra Madre Water Co. (weir) | .145 |
| 24 | do | Remamettes east of Sierra Madre | .09 |
| 18 | do | Monrovia Water Co., 3 wells pumped | 3.24 |
| 24 | do | Monrovia Canyon, to Monrovia Water Co. (weirs) | .428 |
| | | To Bradbury | .116 |
| | | Total | .544 |
| 21 | do | Duarte Mutual Improvement & Canal Co | .78 |
| 21 | do | Beardsley Water Co | .44 |
| 13 | do | Morengo Water Co., Southern Pacific Co.'s Garfield station (weir). | 1.82 |
| 13 | do | Morengo Water Co.'s weir in Morengo Canyon (weir) | .46 |
| 13 | do | Los Robles Water Co.'s reservoir (weir) | .31 |
| 13 | do | Reservoir at junction of Glenarm and Los Robles avenues, Pasadena (weir). | .068 |
| 13 | do | Graves & Bean tunnel | 1.10 |
| 14 | do | Brick kiln between Molino and Hope streets, Pasadena. | .02 |
| 14 | do | Oak Knoll Park, Pasadena | .34 |
| 14 | do | Patton tunnel, near Kewen Lake | .18 |
| 14 | do | Patton's east canyon | 1.48 |
| 17 | do | Patton's east canyon, natural flow; pump not running. | .37 |
| 17 | do | Mission ditch, Patton ranch | .20 |
| 14 | do | Winston ranch | .56 |
| 14 | do | Shorbes ranch (weir) | .18 |
| 15 | do | Yoakham's ranch (weir) | .12 |
| 15 | do | Robert Liddel, San Pasqual and Shorb (weir) | .10 |
| 15 | do | R. W. Scoville (weir) | .07 |
| 15 | do | Mrs. Black, San Pasqual and Craig streets (weir) | .07 |
| 15 | do | Morningside ranch (weir) | .04 |

[illegible]

*Discharge measurements of Bear Creek, San Gabriel River, at point near mouth, Los Angeles County, Cal.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| | | *Sec.-feet.* | | | *Sec.-feet.* |
| [illegible] | F. C. Finkle | 4.3 | September, 1897 | F. C. Finkle | [illegible] |
| [illegible] | do | 6.2 | April, 1900 | J. B. Lippincott et al. | [illegible] |
| [illegible] | do | [illegible] | | | |

*Discharge measurements of Coldwater Creek, San Gabriel River, Los Angeles County, Cal.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| | | *Sec.-feet.* | | | *Sec.-feet.* |
| [illegible] | F. C. Finkle | 4.1 | June, 1897 | F. C. Finkle | [illegible] |
| [illegible] | do | 4.2 | July, 1897 | do | [illegible] |
| [illegible] | do | 11.3 | August, 1897 | do | [illegible] |
| [illegible] | do | 19.1 | September, 1897 | do | [illegible] |
| [illegible] | do | 17.8 | April, 1900 | J. B. Lippincott et al. | [illegible] |
| [illegible] | do | 11.3 | | | |
| [illegible] | do | 9.8 | | | |

*Discharge measurements of North Fork of San Gabriel River.*

| Date. | Hydrographer. | Discharge. | Date. | Hydrographer. | Discharge. |
|---|---|---|---|---|---|
| | | *Sec.-feet.* | | | *Sec.-feet.* |
| [illegible] | F. C. Finkle | 3.7 | June, 1897 | F. C. Finkle | [illegible] |
| [illegible] | do | 3.6 | July, 1897 | do | [illegible] |
| [illegible] | do | 10.8 | August, 1897 | do | [illegible] |
| [illegible] | do | 17.0 | September, 1897 | do | [illegible] |
| [illegible] | do | 19.4 | April, 1900 | J. B. Lippincott et al. | [illegible] |
| [illegible] | do | 13.8 | | | |
| [illegible] | do | 11.2 | | | |

*Discharge measurements of water supplies in San Dimas Wash, Cal.*

| Date. | Hydrographer. | Well. | Discharge. |
|---|---|---|---|
| 1900. | | | *Sec.-feet.* |
| Sept. 27 | Irwin F. Daniels | Daty & Sons | [illegible] |
| 27 | do | San Dimas Irrigation Co., F. D. Smith well | [illegible] |
| 27 | do | Thacker well | [illegible] |
| 27 | do | Smith well (private) | [illegible] |
| 27 | do | Chapman well | [illegible] |
| 27 | do | Ruddock well | [illegible] |
| 27 | do | Artesian Belt Co., 2 wells | [illegible] |
| 27 | do | Azusa city well | [illegible] |
| 27 | do | Walker well | [illegible] |
| 27 | do | Citizens' Water Co. (Covina) | [illegible] |
| 27 | do | Covina plant, Deacon well | [illegible] |
| 27 | do | Natural flow, San Dimas Canyon | [illegible] |
| 27 | do | Spark's well | .40 |
| | | | [illegible] |

*Discharge measurements in San Gabriel Valley at wells on Lordsburg Mesa, Cal.*

| Date. | Hydrographer. | Well. | Discharge. |
|---|---|---|---|
| | | | *Sec.-feet* |
| Sept. [illegible] | Irwin F. Daniels | Richards, 4 wells | [illegible] |
| [illegible] | do | Sumner | [illegible] |
| [illegible] | do | Sheldon Bros. | [illegible] |
| [illegible] | do | La Verne Land & Water Co. | [illegible] |
| [illegible] | do | Rodgers | [illegible] |
| [illegible] | do | True (5 days in 30) | [illegible] |
| [illegible] | do | Rodney Super | [illegible] |
| [illegible] | do | Hayes & Stanton | [illegible] |
| [illegible] | do | Wallace | [illegible] |
| [illegible] | do | Mutland | [illegible] |
| [illegible] | do | Douglas & McQuilty | [illegible] |
| [illegible] | do | Norris | [illegible] |
| [illegible] | do | Williams Bros. | [illegible] |
| [illegible] | do | Kulp (intermittent) south of Mesa Avenue | [illegible] |
| [illegible] | do | D. Fulton | [illegible] |
| [illegible] | do | Steven | [illegible] |
| [illegible] | do | Daniels & Overholtzer | [illegible] |
| [illegible] | do | Massey, 2 wells | [illegible] |
| [illegible] | do | Hauser Bros. | [illegible] |
| [illegible] | do | Meerveer & Son | [illegible] |
| [illegible] | do | Sleider | [illegible] |
| [illegible] | do | Rutherford & Co. | [illegible] |
| [illegible] | do | New Deal Water Co. | [illegible] |
| [illegible] | do | Kiser | [illegible] |
| | | | 12.54 |

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the San Gabriel River basin:

*Miscellaneous measurements in San Gabriel River drainage basin.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| July 1, 1898 | Sawpit Creek | F. H. Olmsted | Near mouth of canyon | [illegible] |
| Aug. 7, 1900 | Sheep Creek | S. G. Bennett | | [illegible] |
| Oct. 3, 1903 | do | W. B. Clapp | Whittier flume crossing | 4.5 |
| Oct. 5, 1904 | do | do | do | 1.4 |
| Oct. 6, 1905 | do | do | do | 4.5 |
| Sept. 1, 1902 | Slauson well | do | | .9 |
| Aug. 7, 1900 | Standiferd ditch | S. G. Bennett | | 14.6 |
| July 15, 1902 | do | J. B. Lippincott | | 19.1 |
| Oct. 2, 1903 | do | W. B. Clapp | Heading | 14.9 |
| Oct. 5, 1904 | do | do | do | 12.9 |
| Oct. 6, 1905 | do | do | do | 15.6 |
| July 3, 1898 | Temple ditch | F. H. Olmsted | Left of Narrows flume | 9.1 |
| Aug. 7, 1900 | do | S. G. Bennett | | 1.2 |
| July 3, 1898 | Whittier ditch | F. H. Olmsted | El Monte road crossing | 2.32 |
| Aug. 7, 1900 | do | S. G. Bennett | | 5.71 |
| Oct. 3, 1903 | do | W. B. Clapp | Pumping plant east of El Monte, developed water. | 3.1 |
| Oct. 10, 1898 | Mayberry Canyon | J. B. Lippincott | Alhambra and Mayberry water. | 1.64 |
| Sept. 23, 1899 | do | do | Alhambra water | 1.35 |
| June 2, 1911 | San Gabriel Water Co.'s canal. | | 100 feet above U. S. G. S. gaging station on San Gabriel River near Azusa. | 6.2 |
| June 22, 1911 | do | | do | 15 |
| Jan. 30, 1912 | Azusa canal | | 1,000 feet below power house at Azusa. | 32 |
| Do | Duarte canal | | ½ mile below tailrace of Pacific Light & Power Co.'s power house. | 9.9 |
| June 17, 1896 | San Gabriel River | J. B. Lippincott | Mouth of Vineland tunnel. | 1.34 |
| Do | do | do | Same; pump running | 2.11 |
| Apr. 29, 1897 | do | do | Mouth of Vineland tunnel. | 2.23 |
| Do | do | do | Same; shaft No. 2 | 2.11 |

*Miscellaneous measurements in San Gabriel River drainage basin*—Continued.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Apr. 29, 1897 | San Gabriel River | J. B. Lippincott | Mouth of Vineland tunnel, at head of flume, between shafts Nos. 3 and 4. | 2.13 |
| Do | do | do | Same; right fork, above shaft No. 4. | 1.07 |
| May 24, 1897 | do | do | Mouth of Vineland tunnel. | 1.88 |
| June 17, 1896 | do | do | Azusa irrigators' development tunnel. | 3.99 |
| Aug. 24, 1898 | do | do | Same place; river being diverted through power company's conduit. | .22 |
| Do | do | do | Irrigators' development tunnel, pumped; additional. | .30 |
| Aug. 23, 1898 | do | do | Junction of East and West forks. | 9.87 |
| Do | do | do | Head works of San Gabriel Power Co. | 8.42 |
| July 3, 1898 | do | F. H. Olmsted | Original river channel | 6.18 |
| Do | do | do | Channel No. 2; Baldwin ranch house road. | 8.79 |
| Do | do | do | Channel No. 3; Campers station. | 3.36 |
| Apr. 15, 1903 | do | W. B. Clapp | El Monte Bridge | 50 |
| Apr. 26, 1903 | do | O. W. Peterson | do | 2.29 |
| May 26, 1903 | do | W. B. Clapp | do | 0 |
| Apr. 13, 1905 | do | R. S. Hawley | do | 47 |
| Apr. 15, 1903 | do | W. B. Clapp | Lexington wash at El Monte. | 3 |
| May 26, 1903 | do | do | Total at head of Lexington wash. | 66 |
| Apr. 14, 1903 | do | do | Upper road crossing, Duarte to Azusa. | 264 |
| Apr. 23, 1903 | do | O. W. Peterson | Opposite Alamitos | 311 |
| Apr. 24, 1903 | do | do | Southern California Ry. at Rivera. | 365 |
| Do | do | do | Southern California Ry. at Studebaker. | 364 |
| Dec. 5, 1897 | do | J. B. Lippincott | Whittier road crossing | 106 |
| Apr. 25, 1903 | do | O. W. Peterson | do | 361 |
| Do | do | do | Road crossing east of Durfee's ranch. | 264 |
| Aug. 23, 1898 | San Gabriel River, East Fork. | J. B. Lippincott | Above junction with West Fork. | 7.11 |
| Do | San Gabriel River, West Fork. | do | Above junction with East Fork. | 2.67 |
| June 20, 1910 | do | | 100 feet above junction with North Fork. | 8.5 |
| Do | San Gabriel River, North Fork of West Fork. | | 500 feet above mouth | 7.2 |
| July 3, 1898 | Rio Hondo | F. H. Olmsted | Old Mission Bridge | 29.8 |
| Aug. 8, 1900 | do | S. G. Bennett | do | 23.3 |
| July 15, 1902 | do | J. B. Lippincott | do | 23.8 |
| Aug. 18, 1902 | do | J. A. Worthen | do | 24.3 |
| Sept. 8, 1902 | do | do | do | 25.6 |
| Sept. 27, 1902 | do | do | do | 21.5 |
| Oct. 11, 1902 | do | do | do | 24.7 |
| Apr. 27, 1903 | do | O. W. Peterson | do | 36 |
| Oct. 2, 1903 | do | W. B. Clapp | do | 29 |
| June 15, 1904 | do | J. A. Worthen | do | 22 |
| July 8, 1904 | do | do | do | 24.1 |
| Aug. 31, 1904 | do | do | do | 22.2 |
| Sept. 24, 1904 | do | do | do | 21.7 |
| Oct. 5, 1904 | do | W. B. Clapp | do | 22 |
| Oct. 15, 1904 | do | J. A. Worthen | do | 27 |
| Oct. 6, 1905 | do | W. B. Clapp | do | 21 |
| Apr. 20, 1903 | do | O. W. Peterson | San Pedro, Los Angeles & Salt Lake Ry. above Workman. | 29 |
| Apr. 27, 1903 | do | do | Whittier road crossing | 17 |
| Do | do | do | Road crossing west of Rivera. | 12 |
| Do | do | do | Southern Pacific R. R. west of Downey. | 12 |
| Aug. 8, 1900 | Agricultural ditch | S. G. Bennett | | .0 |
| Do | Arroyo ditch | do | | 21.1 |
| July 25, 1902 | do | J. A. Worthen | Dam | 21.7 |
| June 15, 1904 | do | do | do | 20.6 |
| July 8, 1904 | do | do | do | 19.7 |
| Aug. 31, 1904 | do | do | do | 18.6 |

*Miscellaneous measurements in San Gabriel River drainage basin*—Continued.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Sept. 24, 1904 | Arroyo ditch | J. A. Worthen | Dam | 17.[illegible] |
| Oct. 5, 1904 | do | do | do | 29.[illegible] |
| Sept. 27, 1902 | do | do | Intake | 24.[illegible] |
| Oct. 11, 1902 | do | do | do | 24.2 |
| June 21, 1904 | do | Clapp and Parker | do | 21.7 |
| Sept. 8, 1902 | do | J. A. Worthen | San Pedro, Los Angeles & Salt Lake Ry. | 19.6 |
| Oct. 11, 1902 | do | do | do | 20.5 |
| June 15, 1904 | do | do | do | 17.5 |
| July 8, 1904 | do | do | do | 17.9 |
| Aug. 18, 1904 | do | do | do | 2[illegible].6 |
| Aug. 31, 1904 | do | do | do | 1[illegible].4 |
| Sept. 24, 1904 | do | do | do | [illegible] |
| Sept. 27, 1904 | do | do | do | 1[illegible].[illegible] |
| Oct. 5, 1904 | do | do | do | 1[illegible].5 |
| June 21, 1904 | do | Clapp and Parker | do | 19.4 |
| Aug. 18, 1902 | do | J. A. Worthen | Point of diversion | 2[illegible].[illegible] |
| Sept. 8, 1902 | do | do | do | 23.2 |
| June 21, 1904 | do | Clapp and Parker | Head of flume | [illegible] |
| Aug. 31, 1904 | do | J. A. Worthen | do | 1[illegible].2 |
| Sept. 24, 1904 | do | do | do | 15.5 |
| Oct. 10, 1904 | do | do | do | 1[illegible].6 |
| Apr. 25, 1903 | do | J. B. Lippincott | Southern California Ry. | 21 |
| July 29, 1902 | Baldwin ditch (Rio Hondo). | J. A. Worthen | Point 1 | [illegible].2 |
| Aug. 18, 1902 | do | do | do | [illegible].7 |
| Sept. 8, 1902 | do | do | do | .91 |
| Sept. 27, 1902 | do | do | do | 2.0 |
| Oct. 15, 1902 | do | do | do | [illegible] |
| June 15, 1904 | do | do | do | 3.0 |
| July 8, 1904 | do | do | do | 3.4 |
| Aug. 31, 1904 | do | do | do | 3.[illegible] |
| Sept. 24, 1904 | do | do | do | [illegible] |
| Oct. 5, 1904 | do | W. B. Clapp | do | [illegible] |
| Oct. 15, 1904 | do | J. A. Worthen | do | [illegible] |
| July 20, 1902 | do | do | Point 3 | [illegible] |
| Aug. 18, 1902 | do | do | do | [illegible] |
| Sept. 8, 1902 | do | do | do | [illegible] |
| Sept. 27, 1902 | do | do | do | .3 |
| Oct. 11, 1902 | do | do | do | [illegible] |
| Sept. 24, 1903 | do | do | do | .4 |
| Oct. 15, 1903 | do | do | do | .5 |
| June 8, 1904 | do | do | do | [illegible] |
| June 15, 1904 | do | do | do | 1.[illegible] |
| Aug. 31, 1904 | do | do | do | [illegible] |
| July 29, 1902 | Baldwin ditch | do | Point 4 | [illegible].9 |
| Aug. 18, 1902 | do | do | do | [illegible].2 |
| Sept. 8, 1902 | do | do | do | [illegible] |
| Sept. 27, 1902 | do | do | do | [illegible] |
| Oct. 11, 1902 | do | do | do | [illegible] |
| June 15, 1904 | do | do | do | [illegible] |
| July 8, 1904 | do | do | do | [illegible] |
| Aug. 31, 1904 | do | do | do | [illegible] |
| Oct. 15, 1904 | do | do | do | [illegible] |
| Oct. 6, 1905 | do | W. B. Clapp | Old Mission Bridge | [illegible] |
| May 23, 1903 | Baldwin division (Santa Anita Creek). | do | Heading | [illegible] |
| Sept. 9, 1903 | do | do | do | [illegible] |
| Aug. 7, 1900 | Banta ditch | S. G. Bennett | | [illegible] |
| July 15, 1902 | do | J. B. Lippincott | | [illegible] |
| Oct. 2, 1903 | do | W. B. Clapp | Heading | [illegible] |
| Oct. 5, 1904 | do | do | 100 feet below division box. | [illegible] |
| Oct. 6, 1905 | do | do | Below headgate of Ranchito ditch. | [illegible] |
| Aug. 7, 1900 | Cate ditch | S. G. Bennett | Near head | [illegible] |
| July 15, 1902 | do | J. B. Lippincott | In flume at road crossing. | [illegible] |
| Oct. 2, 1903 | do | W. B. Clapp | do | [illegible] |
| Oct. 11, 1904 | do | do | do | 11.1 |
| Oct. 6, 1905 | do | do | do | 11.[illegible] |
| Apr. 20, 1903 | Dalton Creek | Clapp and Clausen | Mouth of canyon | [illegible] |
| May 22, 1903 | do | W. B. Clapp | do | 2.[illegible] |
| Sept. 14, 1903 | do | do | do | .0 |
| May 22, 1903 | do | do | 1 mile below mouth of canyon. | .0 |
| Apr. 20, 1903 | do | do | Southern California Ry. | .0 |
| Oct. 3, 1903 | Durfee ditch | do | Road crossing above ranch house. | 1.6 |
| [illegible] | do | do | do | .0 |

[illegible]ated. Main stream flowing through waste gate into old channel.

*Miscellaneous measurements in San Gabriel River drainage basin*—Continued.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Nov. 14, 1898 | Eaton Canyon Creek | J. B. Lippincott | | 2.11 |
| Jan. 11, 1899 | do | E. P. Dewey | Near falls | .50 |
| Apr. 16, 1903 | do | W. B. Clapp | Mouth of canyon | 29.0 |
| May 21, 1903 | do | do | do | 3.0 |
| Do | | | Water Co.'s diversion | 3.0 |
| Sept. 9, 1902 | Eaton Canyon Creek | W. B. Clapp | Mouth of canyon | .0 |
| Apr. 18, 1903 | do | do | Southern California Ry | .0 |
| May 21, 1903 | do | do | 1 mile above Southern California Ry. | .0 |
| Aug. 7, 1900 | Killion's pumping plant | S. G. Bennett | 4 wells near El Monte | 10.2 |
| Aug. 8, 1900 | Little Lake | do | | .22 |
| July 3, 1898 | Puente ditch | F. H. Olmsted | 50 per cent of usual head in ditch. | 1.22 |
| July 7, 1898 | Rincon ditch | S. G. Bennett | | 2.47 |
| Oct. 3, 1903 | do | W. B. Clapp | Rincon road crossing | 3.4 |
| Oct. 5, 1904 | do | do | do | 1.5 |
| Oct. 6, 1905 | do | do | do | 3.4 |
| Aug. 8, 1900 | Rodriguez ditch | S. G. Bennett | Near Old Mission | 2.0 |
| Apr. 20, 1903 | San Dimas Creek | Clapp and Clausen | Mouth of canyon | 19.0 |
| May 22, 1903 | do | W. B. Clapp | do | 2.5 |
| Sept. 14, 1903 | do | do | do | .0 |
| Apr. 20, 1903 | do | do | Base Line avenue | .0 |
| Apr. 25, 1093 | San Jose Creek | O. W. Peterson | Whittier and Puente road | 8.0 |
| Apr. 15, 1903 | Santa Anita Creek | W. B. Clapp | Mouth of canyon | 35.0 |
| Oct. 23, 1905 | do | do | do | 1.5 |
| Apr. 18, 1903 | do | do | Southern Pacific R. R., Monrovia branch. | .0 |
| May 22, 1903 | do | do | White Oak Avenue | .0 |
| Apr. 18, 1903 | Santa Anita Creek, Little. | do | Above Santa Anita Creek | 5.0 |

## LOS ANGELES RIVER BASIN.

### DIVERSIONS FROM LOS ANGELES RIVER.

During the summer the amount of water in the 44-inch conduit and in the main-supply conduit of the city of Los Angeles has been measured to determine the amount of water diverted from Los Angeles River for domestic supply. The water is taken from the river near Burbank and the measurements show the entire surface flow and underground development of the river at this point during the summer. Some return seepage water appears again in the river channel near Huron Street, Los Angeles, near which point the city has an underground gallery or tunnel for collecting an auxiliary supply which is pumped into the reservoir and used in the general distributing system.

*Discharge measurements of Los Angeles River at Los Angeles, Cal.*

| Date. | Hydrographer. | Discharge. 44-inch conduit. | Main supply ditch. | River at Huron Street. | Total. |
|---|---|---|---|---|---|
| 1904. | | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* | *Sec.-ft.* |
| Apr. 15 | F. B. Cook | 42.3 | 4.5 | ........ | 46.8 |
| May 25 | Clapp and Cook | 40.0 | 8.0 | ........ | 48.0 |
| June 18 | F. B. Cook | 29.2 | 10.8 | ........ | 40.0 |
| 24 | do | 31.7 | 8.6 | ........ | 40.3 |
| 27 | Clapp and La Rue | 34.2 | 8.6 | 3.7 | 46.5 |
| July 19 | La Rue and Cook | 33.1 | 10.2 | 5.3 | 48.6 |
| Aug. 9 | F. B. Cook | 29.9 | 10.4 | ........ | 41.3 |
| 18 | La Rue and Cook | 30.5 | 10.8 | 3.6 | 44.9 |
| Sept. 7 | F. B. Cook | 29.7 | 10.4 | ........ | 41.1 |
| 20 | E. C. La Rue | 31.1 | 11.0 | 3.4 | 45.5 |
| Oct. 20 | do | 31.9 | 11.6 | 8.2 | 51.7 |
| 25 | F. B. Cook | 31.4 | 11.6 | ........ | 43.0 |
| Nov. 18 | La Rue and Cook | 33.3 | 11.8 | 8.4 | 53.5 |
| Dec. 28 | E. C. La Rue | 27.7 | 10.0 | 22.2 | 59.9 |
| 1905. | | | | | |
| May 15 | ........ | 42.0 | 11.0 | 10.6 | 63.6 |
| June 22 | ........ | 38.0 | 9.9 | 3.3 | 51.2 |
| July 28 | ........ | 37.0 | 8.4 | 4.6 | 50.0 |
| Sept. 19 | ........ | 35.3 | 8.7 | 3.4 | 47.4 |

*Measurements of flow, in second-feet, of diversions from Los Angeles River by the city of Los Angeles in 1906–1909.*

| Date. | 44-inch conduit discharge. | Main-supply conduit discharge. | Total. | Date. | 44-inch conduit discharge. | Main-supply conduit discharge. | Total. |
|---|---|---|---|---|---|---|---|
| 1906. | | | | 1908. | | | |
| Feb. 24[a] | 26.59 | 6.58 | 33.17 | May 21 | 43.31 | 13.81 | 57.12 |
| Apr. 20 | 36.23 | 7.67 | 43.90 | June 25 | 42.72 | 12.67 | 55.39 |
| June 23 | 31.76 | 15.86 | 47.62 | July 31 | 37.73 | 12.96 | 50.69 |
| July 17 | 34.73 | 9.43 | 44.16 | Aug. 3 | 33.34 | 17.16 | 50.50 |
| 20 | 33.95 | 10.23 | 44.18 | 5 | 38.12 | 13.00 | 51.12 |
| Aug. 22 | 30.49 | 13.67 | 44.16 | 7 | 35.73 | 15.16 | 50.89 |
| 31 | 32.86 | 11.30 | 44.16 | 26 | 34.73 | 16.43 | 51.16 |
| Sept. 21 | 38.11 | 4.43 | 42.54 | Sept. 22 | 38.73 | 16.30 | 55.03 |
| 23 | 29.48 | 13.20 | 42.68 | Oct. 23 | 40.24 | 14.65 | 54.89 |
| Nov. 22 | 32.73 | 13.50 | 46.23 | Nov. 20 | 35.54 | 21.78 | 57.32 |
| Dec. 18 | 33.61 | 15.66 | 49.27 | Dec. 30 | 36.91 | 22.98 | 59.89 |
| 1907. | | | | 1909. | | | |
| Apr. 8 | 42.50 | 22.61 | 65.11 | Mar. 16 | 40.19 | 25.47 | 65.66 |
| May 9 | 44.96 | 19.50 | 64.46 | Apr. 9 | 37.99 | 24.65 | 62.64 |
| June 5 | 50.46 | 8.55 | 59.01 | May 13 | 37.84 | 23.41 | 61.25 |
| July 12 | 35.13 | 18.03 | 53.16 | June 9 | 37.93 | 23.25 | 61.18 |
| Aug. 8 | 32.24 | 17.38 | 49.62 | July 28 | 37.28 | 21.90 | 59.18 |
| 29 | 36.45 | 14.69 | 51.14 | Aug. 12 | 35.28 | 22.22 | 57.50 |
| Oct. 8 | 38.51 | 16.26 | 54.77 | Sept. 8 | 36.04 | 21.06 | 57.10 |
| Nov. 9 | 35.52 | 19.63 | 55.15 | Oct. 23 | 37.02 | 22.03 | 59.05 |
| 1908. | | | | | | | |
| Apr. 29 | 44.44 | 12.30 | 56.74 | | | | |

[a] On Feb. 24, 1906, 23.9 second-feet was passing intake and is not included in above total. On Apr. 20, 7.4 second-feet was passing intake and is not included in above total.

## LOS ANGELES RIVER ABOVE LOS ANGELES, CAL.

*Discharge of Los Angeles River at weirs above Los Angeles, Cal.*

**Weir No. 11, [illegible] miles above city limits.**

| Month | Discharge in second-feet. Maximum. | Minimum. | Mean. | Total acre-feet. |
|---|---|---|---|---|
| 1906. | | | | |
| August | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |

**Weir No. 1, 2.73 miles above city limits.**

| Month | Maximum. | Minimum. | Mean. | Total acre-feet. |
|---|---|---|---|---|
| 1906. | | | | |
| August | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |

**Weir No. 4, 7.27 miles above city limits.**

| Month | Maximum. | Minimum. | Mean. | Total acre-feet. |
|---|---|---|---|---|
| 1906. | | | | |
| August | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| 1907. | | | | |
| January | [illegible] | [illegible] | [illegible] | [illegible] |

**Weir No. 5, 4.27 miles above city limits.**

| Month | Maximum. | Minimum. | Mean. | Total acre-feet. |
|---|---|---|---|---|
| 1906. | | | | |
| August | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| 1907. | | | | |
| January | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] |

**Weir No. 8, 1.65 miles above city limits.**

| Month | Maximum. | Minimum. | Mean. | Total acre-feet. |
|---|---|---|---|---|
| 1906. | | | | |
| August | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] |
| October | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| 1907. | | | | |
| January | [illegible] | [illegible] | [illegible] | [illegible] |

## LOS ANGELES RIVER AT THE NARROWS, CAL.

Los Angeles River heads immediately south of Santa Clara River [illegible] its various tributaries receiving their supply from the mountains [illegible] rounding the San Fernando Plains. It passes out of the lower end [illegible] the plain through a narrow valley known as The Narrows, at [illegible] lower end of which is the city of Los Angeles. The stream [illegible]

San Fernando Valley have brought down immense quantities of sand and gravel from the mountainous area, and thus have formed the San Fernando Plains. This coarse deposit acts as a natural regulator, absorbing the flood waters, which gradually appear lower down. The rainfall of southern California was deficient for the few years prior to 1902, but the discharge of Los Angeles River at The Narrows remained exceptionally constant, the decrease in 1900 being not more than 20 per cent of the average. On account of the numerous lawsuits which have arisen regarding water rights on this river, a thorough study of its discharge was instituted by the city of Los Angeles, the work being under the direction of J. B. Lippincott, as consulting engineer for the city. The majority of the measurements were made by C. A. Miller, although a number of them were made by F. H. Olmsted, city engineer. Several weirs were placed in the river where the measurements are made. The points of measurements are as follows, in order downstream:

Weir A, at the intersection of Pacoima Avenue with Los Angeles River, in the Lankershim Rancho subdivision.

Weir B, at the intersection of Vineland Avenue with Los Angeles River.

Weir C, at the intersection of Fernando Avenue with Los Angeles River.

Weir E, at the southwest corner of block 73, Providencia Rancho.

Weir G, at the intersection of the east line of block 71, Providencia Rancho, with Los Angeles River.

Weir L, 770 feet above weir H.

Weir H, approximately 300 feet east of the intersection of Buena Vista Street with Los Angeles River.

Weir I, 2,543 feet below weir H.

Weir J, 600 feet east of the west line of block 69, Providencia Rancho.

Weir K, in block 79, Providencia Rancho, 300 feet west of center.

Measuring bridge P, near the southwest corner of block 81, Providencia Rancho, in the headworks site of the city of Los Angeles, commonly known as the Pomeroy & Hooker tract, where river turns to the east at angle of 90 degrees.

Measuring bridge Q, about 400 feet above the junction of the Verdugo Wash with Los Angeles River.

Measuring bridge No. 2, about 600 feet above the head of the power ditch of the Los Angeles City Water Co., in the so-called Crystal Springs tract.

Weir No. 7, 1 mile below the head, in the main supply ditch, sometimes called the Woolen Mill ditch, in the headworks site.

Measuring point No. 7B, at a 3-foot cement pipe in the same ditch, west of bridge No. 2 and at the Los Felix ranch house.

Weir No. 17, opposite bridge No. 2, on what is called the Glassell tributary.

(To get the total flow of river at bridge No. 2, there should be combined the flow at bridges No. 2, No. 17, and No. 7B. In case measurements were not taken on the main supply ditch at No. 7B, the measurement observed at weir No. 7, above No. 7B on the main supply ditch, was used, and the loss between No. 7 and No. 7B, 2.49 second-feet, was deducted. This is shown in detail in the table for bridge No. 2. For bridge Q a similar process is followed, omitting No. 17. For bridge P the observed [illegible] bridge is combined with either the flow at No. 7 or at No. 7B.)

[illegible] 9, at the mouth of Tujunga Creek, near the western end of the headworks [illegible]ear the intersection of Buena Vista Street with Los Angeles River.

STE[illegible]

[illegible]

Wet [illegible]

[illegible]

Mean [illegible]

Wet [illegible]

[illegible]

Mean [illegible]

Wet [illegible]

Au[illegible]
Sep[illegible]
Oc[illegible]
No[illegible]
De[illegible]

Mean [illegible]

Wet [illegible]

Au[illegible]
Sep[illegible]
Oc[illegible]
No[illegible]
De[illegible]

Mean [illegible]

Discharge measurements of Los Angeles River—Continued.

Weir [illegible].

| Date. | Discharge. | Average for month. | Date. | Discharge. | Average for month. |
|---|---|---|---|---|---|
| 1897. | Sec.-ft. | Sec.-ft. | 1898. | Sec.-ft. | Sec.-ft. |
| Aug. [illegible] | [illegible] | [illegible] | May [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | June [illegible] | [illegible] | |
| Sept. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | | July [illegible] | [illegible] | [illegible] |
| Oct. [illegible] | [illegible] | [illegible] | Aug. [illegible] | [illegible] | |
| [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| Nov. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | | Sept. [illegible] | [illegible] | |
| Dec. [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | | Nov. [illegible] | [illegible] | [illegible] |
| Mean | | [illegible] | Mean | | [illegible] |

Weir [illegible].

| Date. | Discharge. | Average for month. | Date. | Discharge. | Average for month. |
|---|---|---|---|---|---|
| 1897. | | | 1898. | | |
| Aug. [illegible] | [illegible] | [illegible] | May [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| Sept. [illegible] | [illegible] | [illegible] | June [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| Oct. [illegible] | [illegible] | [illegible] | July [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | Aug. [illegible] | [illegible] | |
| [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| Nov. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| Dec. [illegible] | [illegible] | [illegible] | Sept. [illegible] | [illegible] | |
| [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| | | | Nov. [illegible] | [illegible] | [illegible] |
| Mean | | [illegible] | Mean | | [illegible] |

Weir [illegible].

| Date. | Discharge. | Average for month. | Date. | Discharge. | Average for month. |
|---|---|---|---|---|---|
| 1897. | | | 1898. | | |
| Aug. [illegible] | [illegible] | [illegible] | May [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| Sept. [illegible] | [illegible] | [illegible] | June [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| Oct. [illegible] | [illegible] | [illegible] | July [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | Aug. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| Nov. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| Dec. [illegible] | [illegible] | [illegible] | Sept. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| [illegible] | [illegible] | | [illegible] | [illegible] | |
| | | | Nov. [illegible] | [illegible] | [illegible] |
| Mean. | | [illegible] | Mean | | [illegible] |

Weir [illegible].

| Date. | Discharge. | Average for month. | Date. | Discharge. | Average for month. |
|---|---|---|---|---|---|
| 1897. | | | 1898. | | |
| Aug. [illegible] | [illegible] | [illegible] | May [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | | [illegible] | 16.05 | |
| Sept. [illegible] | [illegible] | 17.23 | June [illegible] | 15.66 | 15.57 |
| 28 | [illegible] | | 29 | 15.49 | |
| Oct. [illegible] | [illegible] | [illegible] | July [illegible] | 15.58 | 15.16 |
| 25 | [illegible] | | [illegible] | 14.74 | |
| Nov. [illegible] | [illegible] | [illegible] | Aug. 1 | [illegible] | 14.70 |
| 22 | 19.72 | | 8 | 14.94 | |
| Dec. [illegible] | [illegible] | [illegible] | 15 | [illegible] | |
| 28 | 19.90 | | [illegible] | 14.80 | |
| | | | Sept. [illegible] | 14.54 | 14.53 |
| | | | 11 | 14.74 | |
| | | | [illegible] | 14.31 | |
| | | | Nov. 10 | 14.92 | 14.92 |
| [illegible] | | 17.97 | Mean | | 15.17 |

*Discharge measurements of Los Angeles River*—Continued.

**Bridge P.**

[Total discharge of river at bridge P equals discharge at bridge + discharge at No. 7, or + discharge at No. 7B.]

| Date. | Discharge at No. 7, or No. 7B. | Discharge at bridge. | Total discharge at bridge. | Average for month. |
|---|---|---|---|---|
| **1899.** | *Second-feet.* | *Second-feet.* | *Second-feet.* | *Second-feet.* |
| Aug. 25 | 18.66 | 20.22 | 38.88 | 38.88 |
| Sept. 20 | 17.90 | 19.36 | 37.26 | 38.00 |
| 27 | 18.68 | 20.06 | 38.74 | |
| Oct. 10 | 18.08 | 19.91 | 37.99 | 37.19 |
| 25 | 17.45 | 17.62 | 35.07 | |
| 28 | 17.45 | 21.06 | 38.51 | |
| Nov. 17 | 18.02 | 25.73 | 43.75 | 42.34 |
| 29 | 13.18 | 27.75 | 40.93 | |
| Dec. 13 | 13.90 | 31.94 | 45.94 | 43.[illegible] |
| 28 | 13.66 | 27.67 | 41.33 | |
| **Mean** | | | | 40.[illegible] |
| **1900.** | | | | |
| May 15 | 17.60 | 21.22 | 38.82 | 36.49 |
| 23 | 13.88 | 20.28 | 34.16 | |
| June 12 | 17.32 | 18.59 | 35.91 | 35.91 |
| July 2 | 13.83 | 19.51 | 33.34 | 32.17 |
| 12 | 14.00 | 16.99 | 30.99 | |
| Aug. 1 | 14.00 | 17.04 | 31.04 | 33.23 |
| 9 | 14.00 | 18.71 | 32.71 | |
| 15 | 16.00 | 19.94 | 35.94 | |
| Sept. 8 | | 19.26 | | |
| 11 | 17.32 | 19.67 | 36.99 | 35.24 |
| 28 | 15.10 | 18.38 | 33.48 | |
| **Mean** | | | | 34.[illegible] |

**Bridge Q.**

[Total discharge of river at bridge Q equals discharge at Q + discharge at No. 7-2.40, or + No. 7B.]

| Date. | Discharge at No. 7-2.40, or 7B. | Discharge at bridge. | Total discharge at bridge. | Average for month. |
|---|---|---|---|---|
| 1899. | *Second-feet.* | *Second-feet.* | *Second-feet.* | *Second-feet.* |
| Sept. 20 | 15.41 | 28.12 | 43.53 | 43.84 |
| 27 | 16.17 | 27.99 | 44.16 | |
| Oct. 10 | 15.59 | 27.77 | 43.36 | 41.31 |
| 25 | 8.21 | 27.66 | 35.87 | |
| 28 | 8.23 | 36.48 | 44.71 | |
| Nov. 17 | 9.36 | 39.71 | 49.07 | 47.58 |
| 29 | 12.20 | 33.89 | 46.09 | |
| Dec. 13 | 11.41 | 35.99 | 47.40 | 45.21 |
| 28 | 11.17 | 31.86 | 43.03 | |
| **Mean** | | | | 44.49 |
| 1900. | | | | |
| May 15 | 17.60 | 28.42 | 46.02 | 43.93 |
| 23 | 13.88 | 27.97 | 41.85 | |
| June 12 | 17.32 | 27.64 | 44.96 | 44.96 |
| July 2 | 13.83 | 26.20 | 40.03 | 39.41 |
| 12 | 14.00 | 24.79 | 38.79 | |
| Aug. 1 | 14.00 | 24.48 | 38.48 | 38.48 |
| Sept. 8 | | 27.09 | | |
| 11 | 17.32 | 26.22 | 43.54 | 43.98 |
| 28 | 15.10 | 29.33 | 44.43 | |
| **Mean** | | | | 42.15 |

*Miscellaneous measurements in San Gabriel River drainage basin*—Continued.

| Date. | Stream. | Hydrographer. | Locality. | Dis-charge. |
|---|---|---|---|---|
| | | | | Sec.-ft. |
| Sept. [illegible] | Arroyo Seco | F. A. Warren | Dam | [illegible] |
| Oct. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | Intake | [illegible] |
| [illegible] | do | do | do | [illegible] |
| June [illegible] | do | Clapp and Parker | do | [illegible] |
| Sept. [illegible] | do | F. A. Warren | [illegible] | [illegible] |
| Oct. [illegible] | do | do | do | [illegible] |
| June [illegible] | do | do | do | [illegible] |
| July [illegible] | do | do | do | [illegible] |
| Aug. [illegible] | do | do | do | [illegible] |
| Aug. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | do | do | [illegible] |
| June [illegible] | do | Clapp and Parker | do | [illegible] |
| Aug. [illegible] | do | F. A. Warren | Point of diversion | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| June [illegible] | do | Clapp and Parker | Head of flume | [illegible] |
| Aug. [illegible] | do | F. A. Warren | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | J. B. Lippincott | Southern California Ry. | [illegible] |
| July [illegible] | [illegible] | F. A. Warren | Point [illegible] | [illegible] |
| Aug. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | do | do | [illegible] |
| June [illegible] | do | do | do | [illegible] |
| July [illegible] | do | do | do | [illegible] |
| Aug. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | W. B. Clapp | do | [illegible] |
| Oct. [illegible] | do | F. A. Warren | do | [illegible] |
| July [illegible] | do | do | Point [illegible] | [illegible] |
| Aug. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | do | do | [illegible] |
| June [illegible] | do | do | do | [illegible] |
| June [illegible] | do | do | do | [illegible] |
| Aug. [illegible] | do | do | do | [illegible] |
| July [illegible] | [illegible] Creek | do | Point [illegible] | [illegible] |
| Aug. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Sept. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | do | do | [illegible] |
| June [illegible] | do | do | do | [illegible] |
| July [illegible] | do | do | do | [illegible] |
| Aug. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | do | do | [illegible] |
| Oct. [illegible] | do | W. B. Clapp | At [illegible] Bridge | [illegible] |
| May [illegible] | [illegible] | do | Heading | |
| Sept. [illegible] | do | do | do | [illegible] |
| Aug. [illegible] | [illegible] Creek | [illegible] Bennett | | [illegible] |
| [illegible] | do | J. B. Lippincott | | [illegible] |
| [illegible] | do | W. B. Clapp | Heading | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | do | Below heading of [illegible] Creek. | [illegible] |
| [illegible] | [illegible] Creek | [illegible] Bennett | Near head | [illegible] |
| [illegible] | do | J. B. Lippincott | In flume at road crossing | [illegible] |
| [illegible] | do | W. B. Clapp | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | [illegible] Creek | [illegible] | Mouth of canyon | [illegible] |
| [illegible] | do | W. B. Clapp | do | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | [illegible] mile below mouth of canyon. | .0 |
| [illegible] | do | do | Southern California Ry. | .0 |
| [illegible] | [illegible] Creek | do | Road crossing above ranch house. | 1.6 |
| [illegible] | do | do | do | .0 |

a Estimated. Main stream flowing through waste gate into old channel.

*Miscellaneous measurements in San Gabriel River drainage basin*—Continued.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Nov. 14, 1898 | Eaton Canyon Creek | J. B. Lippincott | | 2.11 |
| Jan. 11, 1899 | do | E. P. Dewey | Near falls | .50 |
| Apr. 18, 1903 | do | W. B. Clapp | Mouth of canyon | 29.0 |
| May 21, 1903 | do | do | do | 3.0 |
| Do | | | Water Co.'s diversion | 3.0 |
| Sept. 9, 1903 | Eaton Canyon Creek | W. B. Clapp | Mouth of canyon | .0 |
| Apr. 18, 1903 | do | do | Southern California Ry | .0 |
| May 21, 1903 | do | do | 1 mile above Southern California Ry. | .0 |
| Aug. 7, 1900 | Killion's pumping plant | S. G. Bennett | 4 wells near El Monte | 10.2 |
| Aug. 8, 1900 | Little Lake | do | | .22 |
| July 3, 1898 | Puente ditch | F. H. Olmsted | 50 per cent of usual head in ditch. | 1.22 |
| July 7, 1898 | Rincon ditch | S. G. Bennett | | 2.47 |
| Oct. 3, 1903 | do | W. B. Clapp | Rincon road crossing | 3.4 |
| Oct. 5, 1904 | do | do | do | 1.5 |
| Oct. 6, 1905 | do | do | do | 3.4 |
| Aug. 8, 1900 | Rodriguez ditch | S. G. Bennett | Near Old Mission | 2.0 |
| Apr. 20, 1903 | San Dimas Creek | Clapp and Clausen | Mouth of canyon | 19.0 |
| May 22, 1903 | do | W. B. Clapp | do | 2.5 |
| Sept. 14, 1903 | do | do | do | .0 |
| Apr. 20, 1903 | do | do | Base Line avenue | .0 |
| Apr. 25, 1093 | San Jose Creek | O. W. Peterson | Whittier and Puente road | 8.0 |
| Apr. 18, 1903 | Santa Anita Creek | W. B. Clapp | Mouth of canyon | 35.0 |
| Oct. 23, 1905 | do | do | do | 1.5 |
| Apr. 18, 1903 | do | do | Southern Pacific R. R., Monrovia branch. | .0 |
| May 23, 1903 | do | do | White Oak Avenue | .0 |
| Apr. 18, 1903 | Santa Anita Creek, Little. | do | Above Santa Anita Creek | 5.0 |

## LOS ANGELES RIVER BASIN.

### DIVERSIONS FROM LOS ANGELES RIVER.

During the summer the amount of water in the 44-inch conduit and in the main-supply conduit of the city of Los Angeles has been measured to determine the amount of water diverted from Los Angeles River for domestic supply. The water is taken from the river near Burbank and the measurements show the entire surface flow and underground development of the river at this point during the summer. Some return seepage water appears again in the river channel near Huron Street, Los Angeles, near which point the city has an underground gallery or tunnel for collecting an auxiliary supply which is pumped into the reservoir and used in the general distributing system.

[illegible]

| [illegible] | [illegible] | | | |
| --- | --- | --- | --- | --- |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| --- | --- | --- | --- | --- | --- |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

## LOS ANGELES RIVER ABOVE LOS ANGELES, CAL.

*Discharge of Los Angeles River at weirs above Los Angeles, Cal.*

**Weir No. 11, 9.86 miles above city limits.**

| Month. | Discharge in second-feet. | | | Total in acre-feet. |
|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | |
| **1896.** | | | | |
| August | 16 | 13 | 14 | 861 |
| September | 16 | 14 | 15 | 893 |
| October | 22 | 14 | 16 | 984 |
| November | 18 | 15 | 16 | 952 |
| December | 19 | 15 | 16 | 984 |

**Weir No. 1, 9.78 miles above city limits.**

| Month. | Maximum. | Minimum. | Mean. | Total in acre-feet. |
|---|---|---|---|---|
| **1896.** | | | | |
| August | 21 | 19 | 20 | 1,230 |
| September | 21 | 19 | 20 | 1,190 |
| October | 26 | 19 | 20 | 1,230 |
| November | 24 | 19 | 21 | 1,250 |
| December | 23 | 19 | 20 | 1,230 |

**Weir No. 4, 7.27 miles above city limits.**

| Month. | Maximum. | Minimum. | Mean. | Total in acre-feet. |
|---|---|---|---|---|
| **1896.** | | | | |
| August | 46 | 41 | 44 | 2,705 |
| September | 44 | 41 | 43 | 2,559 |
| October | 56 | 41 | 44 | 2,705 |
| November | 52 | 43 | 46 | 2,737 |
| December | 55 | 43 | 47 | 2,828 |
| **1897.** | | | | |
| January | 47 | 44 | 46 | 2,828 |

**Weir No. 5, 4.87 miles above city limits.**

| Month. | Maximum. | Minimum. | Mean. | Total in acre-feet. |
|---|---|---|---|---|
| **1896.** | | | | |
| August | 77 | 67 | 71 | 4,366 |
| September | 76 | 63 | 71 | 4,225 |
| October | 82 | 65 | 69 | 4,243 |
| November | 76 | 68 | 70 | 4,165 |
| December | 96 | 67 | 72 | 4,427 |
| **1897.** | | | | |
| January | 96 | 67 | 73 | 4,489 |
| February | 96 | 71 | 77 | 4,276 |

**Weir No. 8, 3.65 miles above city limits.**

| Month. | Maximum. | Minimum. | Mean. | Total in acre-feet. |
|---|---|---|---|---|
| **1896.** | | | | |
| August | 73 | 67 | 70 | 4,304 |
| September | 73 | 65 | 69 | 4,106 |
| October | 83 | 65 | 69 | 4,243 |
| November | 74 | 67 | 71 | 4,225 |
| December | 93 | 68 | 73 | 4,489 |
| **1897.** | | | | |
| January | 79 | 71 | 73 | 4,489 |

## LOS ANGELES RIVER AT THE NARROWS, CAL.

Los Angeles River heads immediately south of Santa Clara River, its various tributaries receiving their supply from the mountains surrounding the San Fernando Plains. It passes out of the lower end of the plain through a narrow valley known as The Narrows, at the lower end of which is the city of Los Angeles. The streams entering

San Fernando Valley have brought down immense quantities of sand and gravel from the mountainous area, and thus have formed the San Fernando Plains. This coarse deposit acts as a natural regulator, absorbing the flood waters, which gradually appear lower down. The rainfall of southern California was deficient for the few years prior to 1902, but the discharge of Los Angeles River at The Narrows remained exceptionally constant, the decrease in 1900 being not more than 20 per cent of the average. On account of the numerous lawsuits which have arisen regarding water rights on this river, a thorough study of its discharge was instituted by the city of Los Angeles, the work being under the direction of J. B. Lippincott, as consulting engineer for the city. The majority of the measurements were made by C. A. Miller, although a number of them were made by F. H. Olmsted, city engineer. Several weirs were placed in the river where the measurements are made. The points of measurements are as follows, in order downstream:

Weir A, at the intersection of Pacoima Avenue with Los Angeles River, in the Lankershim Rancho subdivision.

Weir B, at the intersection of Vineland Avenue with Los Angeles River.

Weir C, at the intersection of Fernando Avenue with Los Angeles River.

Weir E, at the southwest corner of block 73, Providencia Rancho.

Weir G, at the intersection of the east line of block 71, Providencia Rancho, with Los Angeles River.

Weir L, 570 feet above weir H.

Weir H, approximately 300 feet east of the intersection of Buena Vista Street with Los Angeles River.

Weir I, 2,043 feet below weir H.

Weir J, 600 feet east of the west line of block 69, Providencia Rancho.

Weir K, in block 79, Providencia Rancho, 300 feet west of center.

Measuring bridge P, near the southwest corner of block 81, Providencia Rancho, in the headworks site of the city of Los Angeles, commonly known as the Pomeroy & Hooker tract, where river turns to the east at angle of 90 degrees.

Measuring bridge Q, about 400 feet above the junction of the Verdugo Wash with Los Angeles River.

Measuring bridge No. 2, about 600 feet above the head of the power ditch of the Los Angeles City Water Co., in the so-called Crystal Springs tract.

Weir No. 7, 1 mile below the head, in the main supply ditch, sometimes called the Woolen Mill ditch, in the headworks site.

Measuring point No. 7B, at a 3-foot cement pipe in the same ditch, west of bridge No. 2 and at the Los Felix ranch house.

Weir No. 17, opposite bridge No. 2, on what is called the Glassell tributary.

(To get the total flow of river at bridge No. 2, there should be combined the flow at bridges No. 2, No. 17, and No. 7B. In case measurements were not taken on the main supply ditch at No. 7B, the measurement observed at weir No. 7, above No. 7B on the main supply ditch, was used, and the loss between No. 7 and No. 7B, 2.49 second-feet, was deducted. This is shown in detail in the table for bridge No. 2. For bridge Q a similar process is followed, omitting No. 17. For bridge P the observed flow at the bridge is combined with either the flow at No. 7 or at No. 7B.)

Weir No. 9, at the mouth of Tujunga Creek, near the western end of the headworks site, and near the intersection of Buena Vista Street with Los Angeles River.

Weir No. 10, approximately 200 feet west of weir No. 9, at the outlet of a small cut which was run into the gravel bed for the development of water.

Weir M, block 67, Providencia Rancho, on a small stream entering the river in the headworks tract.

*Discharge measurements of Los Angeles River.*

**Weir A.**

| Date. | Discharge. | Average for month. | Date. | Discharge. | Average for month. |
|---|---|---|---|---|---|
| 1899. | *Sec.-ft.* | *Sec.-ft.* | 1900. | *Sec.-ft.* | *Sec.-ft.* |
| Aug. 14 | 0.565 | 0.612 | May 17 | 0.461 | 0.461 |
| 19 | .660 | | June 12 | .461 | .431 |
| Sept. 20 | .500 | .500 | 29 | .402 | |
| 26 | .500 | | Aug. 1 | .310 | .370 |
| Oct. 24 | .687 | .687 | 8 | .368 | |
| Nov. 24 | .725 | .723 | 15 | .372 | |
| 28 | .721 | | 31 | .430 | |
| Dec. 7 | .678 | .723 | Sept. 8 | .378 | .368 |
| 28 | .768 | | 11 | .400 | |
| | | | 27 | .328 | |
| | | | Nov. 10 | .380 | .380 |
| Mean | | .649 | Mean | | .402 |

**Weir B.**

| Date. | Discharge. | Average for month. | Date. | Discharge. | Average for month. |
|---|---|---|---|---|---|
| 1899. | | | 1900. | | |
| Aug. 14 | 0.500 | 0.500 | May 17 | 0.482 | 0.482 |
| Sept. 20 | .500 | .500 | June 12 | .430 | .355 |
| 26 | .500 | | 29 | .280 | |
| Oct. 24 | .755 | .755 | July 27 | .160 | .160 |
| Nov. 24 | .937 | .939 | Aug. 1 | .180 | .198 |
| 28 | .941 | | 15 | .197 | |
| Dec. 7 | .864 | .923 | 31 | .219 | |
| 28 | .982 | | Sept. 8 | .209 | .203 |
| | | | 11 | .223 | |
| | | | 27 | .176 | |
| | | | Nov. 10 | .260 | .260 |
| Mean | | .723 | Mean | | .276 |

**Weir C.**

| Date. | Discharge. | Average for month. | Date. | Discharge. | Average for month. |
|---|---|---|---|---|---|
| 1899. | | | 1900. | | |
| Aug. 14 | 2.88 | 2.88 | May 17 | 2.98 | 2.98 |
| 28 | 2.88 | | June 12 | 2.91 | 2.91 |
| Sept. 20 | 2.69 | 2.48 | July 27 | 2.45 | 2.45 |
| 26 | 2.26 | | Aug. 1 | 2.50 | 2.50 |
| Oct. 9 | 2.88 | 2.93 | 8 | 2.48 | |
| 24 | 2.98 | | 15 | 2.48 | |
| Nov. 24 | 3.45 | 3.43 | 31 | 2.55 | |
| 28 | 3.42 | | Sept. 8 | 1.58 | 1.86 |
| Dec. 28 | 3.44 | 3.44 | 11 | 2.38 | |
| | | | 27 | 1.63 | |
| | | | Nov. 10 | 2.42 | 2.42 |
| Mean | | 3.03 | Mean | | 2.52 |

**Weir E.**

| Date. | Discharge. | Average for month. | Date. | Discharge. | Average for month. |
|---|---|---|---|---|---|
| 1899. | | | 1900. | | |
| Aug. 14 | 5.55 | 5.55 | May 15 | 5.45 | 5.45 |
| 28 | 5.55 | | June 12 | 5.18 | 4.99 |
| Sept. 20 | 5.35 | 5.30 | 29 | 4.81 | |
| 26 | 5.25 | | July 12 | 4.80 | 4.80 |
| Oct. 25 | 5.99 | 5.99 | 27 | 4.80 | |
| Nov. 17 | 6.53 | 6.38 | Aug. 1 | 4.53 | 4.63 |
| 28 | 6.24 | | 15 | 4.47 | |
| Dec. 13 | 6.24 | 6.26 | 31 | 4.88 | |
| 21 | 6.24 | | Sept. 8 | 4.49 | 4.48 |
| 26 | 6.30 | | 11 | 4.65 | |
| | | | 27 | 4.30 | |
| | | | Nov. 10 | 4.67 | 4.67 |
| Mean | | 5.89 | Mean | | 4.84 |

*Discharge measurements of Los Angeles River*—Continued.

**Weir G.**

| Date. | Discharge. | Average for month. |
|---|---|---|
| **1899.** | *Sec.-ft.* | *Sec.-ft.* |
| Aug. 14 | 7.92 | 7.92 |
| 28 | 7.92 | |
| Sept. 20 | 7.60 | 7.60 |
| 26 | 7.60 | |
| Oct. 9 | 7.66 | 8.13 |
| 25 | 8.60 | |
| Nov. 17 | 9.17 | 9.08 |
| 28 | 8.99 | |
| Dec. 13 | 8.90 | 8.90 |
| 21 | 8.90 | |
| 26 | 8.92 | |
| **Mean** | | 8.33 |

| Date. | Discharge. | Average for month. |
|---|---|---|
| **1900.** | *Sec.-ft.* | *Sec.-ft.* |
| May 15 | [illegible] | [illegible] |
| June 12 | 7.[illegible]3 | [illegible] |
| 29 | 7.10 | |
| July 27 | [illegible].45 | [illegible] |
| Aug. 1 | [illegible].45 | [illegible] |
| 15 | [illegible].90 | |
| 31 | [illegible] | |
| Sept. 8 | [illegible] | [illegible] |
| 11 | 7.30 | |
| 27 | [illegible] | |
| Nov. 13 | [illegible] | [illegible] |
| **Mean** | | [illegible] |

**Weir L.**

| Date. | Discharge. | Average for month. |
|---|---|---|
| **1899.** | *Sec.-ft.* | *Sec.-ft.* |
| Aug. 14 | 9.08 | 9.00 |
| 28 | 8.93 | |
| Sept. 20 | 8.59 | 8.74 |
| 26 | 8.89 | |
| Oct. 9 | 8.59 | 9.22 |
| 25 | 9.58 | |
| 27 | 9.48 | |
| Nov. 17 | 10.15 | 10.04 |
| 28 | 9.93 | |
| Dec. 13 | 10.02 | 10.11 |
| 21 | 10.02 | |
| 26 | 10.30 | |
| **Mean** | | 9.42 |

| Date. | Discharge. | Average for month. |
|---|---|---|
| **1900.** | *Sec.-ft.* | *Sec.-ft.* |
| May 15 | 8.85 | 8.79 |
| 23 | 8.73 | |
| June 12 | 8.62 | 8.46 |
| 29 | 8.30 | |
| July 27 | 7.53 | 7.53 |
| Aug. 1 | 7.53 | 7.71 |
| 8 | 7.59 | |
| 15 | 7.69 | |
| 31 | 8.02 | |
| Sept. 8 | 7.82 | 7.[illegible] |
| 11 | 8.20 | |
| 27 | 7.76 | |
| Nov. 10 | 8.34 | 8.34 |
| **Mean** | | 8.12 |

**Weir H.**

| Date. | Discharge. | Average for month. |
|---|---|---|
| **1899.** | *Sec.-ft.* | *Sec.-ft.* |
| Aug. 14 | 11.88 | 12.04 |
| 28 | 12.19 | |
| Sept. 20 | 11.60 | 11.82 |
| 26 | 12.03 | |
| Oct. 9 | 11.60 | 12.31 |
| 25 | 12.66 | |
| 27 | 12.66 | |
| Nov. 17 | 13.73 | 13.60 |
| 28 | 13.47 | |
| Dec. 13 | 13.42 | 13.62 |
| 21 | 13.64 | |
| 26 | 13.80 | |
| **Mean** | | 12.68 |

| Date. | Discharge. | Average for month. |
|---|---|---|
| **1900.** | *Sec.-ft.* | *Sec.-ft.* |
| May 15 | 11.42 | 11.[illegible] |
| 23 | 11.21 | |
| June 12 | 11.01 | 10.84 |
| 29 | 10.68 | |
| July 27 | 9.96 | 9.96 |
| Aug. 1 | 9.96 | 10.[illegible] |
| 8 | 10.16 | |
| 15 | 10.13 | |
| 31 | 10.57 | |
| Sept. 8 | 10.15 | 10.[illegible] |
| 11 | 10.39 | |
| 27 | 10.03 | |
| Nov. 10 | 10.54 | 10.54 |
| **Mean** | | 10.[illegible] |

**Weir I.**

| Date. | Discharge. | Average for month. |
|---|---|---|
| **1899.** | *Sec.-ft.* | *Sec.-ft.* |
| Aug. 14 | 17.18 | 17.04 |
| 28 | 16.91 | |
| Sept. 20 | 17.15 | 17.23 |
| 26 | 17.32 | |
| Oct. 9 | 17.19 | 17.76 |
| 25 | 18.33 | |
| Nov. 17 | 19.04 | 18.88 |
| 28 | 18.72 | |
| Dec. 13 | 18.93 | 18.96 |
| 26 | 18.99 | |
| **Mean** | | 17.97 |

| Date. | Discharge. | Average for month. |
|---|---|---|
| **1900.** | *Sec.-ft.* | *Sec.-ft.* |
| May 15 | 16.25 | 16.[illegible] |
| 23 | 16.05 | |
| June 12 | 15.66 | 15.[illegible] |
| 29 | 15.49 | |
| July 12 | 15.58 | 15.16 |
| 27 | 14.74 | |
| Aug. 1 | 14.37 | 14.70 |
| 8 | 14.94 | |
| 15 | 14.69 | |
| 31 | 14.80 | |
| Sept. 8 | 14.54 | 14.[illegible]3 |
| 11 | 14.74 | |
| 27 | 14.31 | |
| Nov. 10 | 14.92 | 14.[illegible]2 |
| **Mean** | | 15.17 |

*Discharge measurements of Los Angeles River*—Continued.

**Weir J.**

[Total discharge of river at weir J equals discharge over weir + discharge at No. 7, or + No. 7B + 2.49.]

| Date. | Discharge at No. 7, or No 7B+2.49 | Discharge over weir. | Total discharge for weir. | Average for month. |
|---|---|---|---|---|
| 1899. | *Second-feet.* | *Second-feet.* | *Second-feet.* | *Second-feet.* |
| Aug. 14 | 18.59 | 0.55 | 19.14 | 18.76 |
| 28 | 17.90 | .49 | 18.39 | |
| Sept. 20 | 17.90 | .49 | 18.39 | 18.58 |
| 26 | 18.28 | .49 | 18.77 | |
| Oct. 9 | 18.08 | .44 | 18.52 | 18.91 |
| 25 | 17.45 | 1.85 | 19.30 | |
| Nov. 17 | 18.02 | 2.91 | 20.93 | 20.71 |
| 28 | 13.78 | 6.71 | 20.49 | |
| Dec. 13 | 13.90 | 6.34 | 20.24 | 20.31 |
| 26 | 13.66 | 6.73 | 20.39 | |
| Mean | ........ | ........ | ........ | 19.45 |
| 1900. | | | | |
| May 15 | 20.09 | 1.39 | 21.48 | 19.76 |
| 23 | 16.57 | 1.67 | 18.04 | |
| June 12 | 19.81 | .86 | 20.67 | 18.92 |
| 29 | 16.31 | .86 | 17.17 | |
| Aug. 15 | 18.49 | .41 | 18.90 | 19.31 |
| 31 | 19.25 | .46 | 19.71 | |
| Sept. 8 | ........ | .42 | ........ | ........ |
| 11 | 19.81 | .52 | 20.33 | 19.15 |
| 27 | 17.59 | .39 | 17.98 | |
| Nov. 10 | 14.84 | 1.49 | 16.33 | 16.33 |
| Mean | ........ | ........ | ........ | 18.69 |

**Weir K.**

[Total discharge of river at weir K equals discharge over weir + discharge at No. 7, or + No. 7B + 2.49.]

| Date. | Discharge at No. 7, or No 7B+2.49 | Discharge over weir. | Total discharge for weir. | Average for month. |
|---|---|---|---|---|
| 1899. | | | | |
| Aug. 14 | 18.59 | 4.13 | 22.72 | 22.27 |
| 28 | 17.90 | 3.92 | 21.82 | |
| Sept. 20 | 17.90 | 3.91 | 21.81 | 22.03 |
| 26 | 18.28 | 3.98 | 22.26 | |
| Oct. 9 | 18.08 | 4.13 | 22.21 | 22.68 |
| 25 | 17.45 | 5.70 | 23.15 | |
| Nov. 17 | 18.02 | 6.97 | 24.99 | 24.73 |
| 28 | 13.78 | 10.69 | 24.47 | |
| Dec. 13 | 13.90 | 10.69 | 24.59 | 24.58 |
| 26 | 13.66 | 10.92 | 24.58 | |
| Mean | ........ | ........ | ........ | 23.26 |
| 1900. | | | | |
| May 15 | 20.09 | 4.94 | 25.03 | 23.17 |
| 23 | 16.37 | 4.94 | 21.31 | |
| July 2 | 16.32 | 2.93 | 19.25 | 19.25 |
| Aug. 1 | ........ | 2.55 | ........ | ........ |
| 15 | 18.49 | 2.71 | 21.20 | 21.50 |
| 31 | 19.25 | 2.56 | 21.80 | |
| Sept. 8 | ........ | 2.81 | ........ | ........ |
| 11 | 19.81 | 2.80 | 22.61 | 21.35 |
| 27 | 17.59 | 2.50 | 20.09 | |
| Nov. 10 | 14.84 | 4.12 | 18.96 | 18.96 |
| Mean | ........ | ........ | ........ | 20.85 |

Discharge measurements of Los Angeles River—Continued.

**Bridge P.**

[Total discharge of river at bridge P equals discharge at bridge + discharge at No. 7, or + discharge at No. 7B.]

| Date. | Discharge at No. 7, or No. 7B. | Discharge at bridge. | Total discharge at bridge. | Average for month. |
|---|---|---|---|---|
| 1899. | Second-feet. | Second-feet. | Second-feet. | Second-feet. |
| Aug. 23 | [illegible].66 | [illegible] | [illegible] | [illegible] |
| Sept. [illegible] | 17.30 | [illegible].36 | [illegible] | [illegible] |
| [illegible] | [illegible].66 | [illegible] | [illegible].74 | |
| Oct. [illegible] | [illegible].08 | [illegible] | [illegible] | |
| [illegible] | 17.45 | [illegible] | 35.07 | [illegible] |
| [illegible] | 17.45 | 21.06 | 38.51 | |
| Nov. 17 | [illegible].02 | [illegible] | 42.75 | [illegible] |
| [illegible] | 13.15 | [illegible] | 40.93 | |
| Dec. 13 | 13.90 | [illegible] | 45.84 | [illegible] |
| [illegible] | 13.66 | [illegible] | 41.[illegible] | |
| Mean | | | | [illegible] |
| 1900. | | | | |
| May 15 | 17.60 | 21.22 | 38.82 | [illegible] |
| 31 | 12.88 | 21.28 | 34.16 | |
| June 12 | 17.22 | 18.39 | 35.91 | [illegible] |
| July 2 | 13.83 | 19.51 | 33.34 | [illegible] |
| 12 | 14.00 | 16.99 | 30.99 | |
| Aug. 1 | 14.00 | 17.04 | 31.04 | [illegible] |
| [illegible] | 14.00 | 18.77 | 32.77 | |
| [illegible] | 16.00 | 19.94 | 35.94 | |
| Sept. 8 | | 19.36 | | |
| 11 | 17.32 | 19.67 | 36.99 | [illegible] |
| 28 | 15.10 | 18.38 | 33.48 | |
| Mean | | | | [illegible] |

**Bridge Q.**

[Total discharge of river at bridge Q equals discharge at Q + discharge at No. 7-2.49, or + No. 7B.]

| Date. | Discharge at No. 7-2.49, or 7B. | Discharge at bridge. | Total discharge at bridge. | Average for month. |
|---|---|---|---|---|
| 1899. | Second-feet. | Second-feet. | Second-feet. | Second-feet. |
| Sept. 20 | 15.41 | 28.12 | 43.53 | 43.[illegible] |
| 27 | 16.17 | 27.99 | 44.16 | |
| Oct. 10 | 15.59 | 27.77 | 43.36 | 41.[illegible] |
| 25 | 8.21 | 27.66 | 35.87 | |
| 28 | 8.23 | 36.48 | 44.71 | |
| Nov. 17 | 9.36 | 39.71 | 49.07 | 47.[illegible] |
| 29 | 12.20 | 33.89 | 46.09 | |
| Dec. 13 | 11.41 | 35.99 | 47.40 | 45.[illegible] |
| 26 | 11.17 | 31.86 | 43.03 | |
| Mean | | | | 44.49 |
| 1900. | | | | |
| May 15 | 17.60 | 28.42 | 46.02 | 43.[illegible] |
| 31 | 13.88 | 27.97 | 41.85 | |
| June 12 | 17.32 | 27.64 | 44.96 | 44.[illegible] |
| July 2 | 13.83 | 26.20 | 40.03 | [illegible] |
| 12 | 14.00 | 24.79 | 38.79 | |
| Aug. 1 | 14.00 | 24.48 | 38.48 | [illegible] |
| Sept. 8 | | 27.09 | | |
| 11 | 17.32 | 26.22 | 43.54 | 43.[illegible] |
| 28 | 15.10 | 29.33 | 44.43 | |
| Mean | | | | 42.[illegible] |

*Discharge measurements of Los Angeles River near bridge No. 2.*

| Date. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|
| 1889. | | | *Sec.-feet.* |
| June 15 | Wm. Mulholland | River | 36.7 |
| 15 | do | Power ditch | 11.1 |
| 15 | do | Main supply ditch | 11.2 |
| | Total at bridge No. 2 | | 59.0 |
| July 15 | Wm. Mulholland | River | 33.3 |
| 15 | do | Power ditch | 11.0 |
| 15 | do | Main supply ditch | 14.1 |
| | Total at bridge No. 2 | | 58.4 |
| 1891. | | | |
| Nov. 18 | Wm. Mulholland | River | 68.0 |
| 18 | do | Power ditch | 10.0 |
| 18 | do | Main supply ditch | 3.0 |
| | Total at bridge No. 2 | | 81.0 |
| 1893. | | | |
| Nov. — | Wm. Mulholland | River | 58.8 |
| — | do | Power ditch | 15.0 |
| — | do | Main supply ditch | (.) |
| 1898. | | | |
| Feb. 28 | do | River | 51.8 |
| 28 | do | Glassell tributary | .7 |
| 28 | do | Main supply ditch | 15.0 |
| 28 | do | Power ditch, measurement above | |
| | Total at bridge No. 2 | | 67.5 |

*Discharge measurements of Los Angeles River at bridge No. 2.*

[Total discharge of river at bridge No. 2 equals discharge at No. 2+discharge at No. 7B, or No. 2+No. 7—2.49.]

| Date. | Discharge at No. 7—2.49, or No. 7B. | Discharge at No. 17. | Discharge at bridge. | Total discharge at bridge. | Average for month. |
|---|---|---|---|---|---|
| 1899. | *Sec.-feet.* | *Sec.-feet.* | *Sec.-feet.* | *Sec.-feet.* | *Sec.-feet.* |
| Aug. 19 | 15.59 | 0.06 | 41.29 | 56.94 | 57.79 |
| 25 | 16.17 | .06 | 42.41 | 58.64 | |
| Sept. 20 | 15.41 | .06 | 40.23 | 55.70 | 56.00 |
| 27 | 16.17 | .06 | 40.07 | 56.30 | |
| Oct. 10 | 15.59 | .05 | 39.35 | 54.99 | 55.61 |
| 25 | 8.21 | .05 | 48.88 | 57.14 | |
| 28 | 8.23 | .05 | 44.45 | 52.73 | |
| 31 | 8.78 | .05 | 48.73 | 57.56 | |
| Nov. 17 | 9.36 | .06 | 49.71 | 59.13 | 57.39 |
| 29 | 12.20 | .06 | 43.40 | 55.66 | |
| Dec. 13 | 11.41 | .07 | 46.69 | 58.17 | 58.15 |
| 26 | 11.17 | .07 | 46.89 | 58.13 | |
| Mean | | | | | 56.99 |
| 1900. | | | | | |
| May 16 | 17.60 | .14 | 39.61 | 57.35 | 54.91 |
| 23 | 13.88 | .14 | 38.46 | 52.48 | |
| June 12 | 17.32 | .14 | 39.23 | 56.69 | 56.69 |
| July 2 | 13.83 | .10 | 35.38 | 49.31 | 52.43 |
| 13 | 15.32 | .14 | 40.10 | 55.56 | |
| Aug. 1 | 14.00 | .10 | 34.62 | 48.72 | 51.12 |
| 8 | 14.00 | .10 | 34.77 | 48.87 | |
| 15 | 16.00 | .10 | 38.58 | 54.68 | |
| 31 | 16.76 | .10 | 35.36 | 52.22 | |
| Sept. 8 | | | 34.27 | | |
| 11 | 17.32 | .20 | 35.56 | 53.08 | 51.27 |
| 28 | 15.10 | .08 | 34.28 | 49.46 | |
| Nov. 10 | 14.84 | .10 | 39.45 | 54.39 | 54.39 |
| Mean | | | | | 53.46 |

*Average discharge of Los Angeles River at weir [illegible].*

| Month. | [illegible] | [illegible] | Month. | [illegible] | [illegible] |
|---|---|---|---|---|---|
| | Sec.-feet. | Sec.-feet. | | Sec.-feet. | Sec.-feet. |
| January | [illegible] | 1.22 | July | [illegible] | [illegible] |
| February | [illegible] | [illegible] | August | [illegible] | [illegible] |
| March | [illegible] | [illegible] | September | [illegible] | [illegible] |
| April | [illegible] | [illegible] | October | [illegible] | |
| May | [illegible] | [illegible] | November | [illegible] | |
| June | [illegible] | [illegible] | December | [illegible] | |

*Average discharge of [illegible] water at weir [illegible].*

| Month. | [illegible] | [illegible] | Month. | [illegible] | [illegible] |
|---|---|---|---|---|---|
| | Sec.-feet. | Sec.-feet. | | Sec.-feet. | Sec.-feet. |
| January | | [illegible] | July | [illegible] | [illegible] |
| February | | [illegible] | August | [illegible] | [illegible] |
| March | [illegible] | [illegible] | September | [illegible] | [illegible] |
| April | [illegible] | [illegible] | October | [illegible] | |
| May | [illegible] | [illegible] | November | [illegible] | |
| June | [illegible] | [illegible] | December | [illegible] | |

*Average discharge of small tributary of Los Angeles River at weir [illegible].*

| Month. | Discharge. | Month. | Discharge. |
|---|---|---|---|
| [illegible] | Sec.-feet. | [illegible] | Sec.-feet. |
| January | 1.38 | July | Dry. |
| February | [illegible] | August | Dry. |
| March | [illegible] | September | [illegible] |
| April | [illegible] | October | [illegible] |
| May | [illegible] | November | [illegible] |
| June | [illegible] | December | Dry. |

*Average discharge of cut of West Los Angeles Water Co. in San Fernando Valley, from gravel beds of Los Angeles River.*

| Month. | [illegible] | [illegible] | Month. | [illegible] | [illegible] |
|---|---|---|---|---|---|
| | Sec.-feet. | Sec.-feet. | | Sec.-feet. | Sec.-feet. |
| May | | 5.79 | September | 6.02 | |
| June | | [illegible] | October | [illegible] | |
| July | | [illegible] | November | [illegible] | |
| August | 4.11 | [illegible] | December | [illegible] | |

*Average discharge of Los Angeles River.*

| Measuring point. | Intervening distance along river. | Average discharge, August to December, inclusive, 1899. | Rate of growth per 100 feet, 1899. | Average discharge May to November, inclusive, 1900. | Rate of growth per 100 feet, 1900. |
|---|---|---|---|---|---|
| | *Feet.* | *Sec.-feet.* | | *Sec.-feet.* | |
| Weir A | | 0.649 | | 0.402 | |
| | 10,280 | | 0.001 | | 0.001 |
| Weir B | | .723 | | .276 | |
| | 3,496 | | .066 | | .064 |
| Weir C | | 3.03 | | 2.52 | |
| | 7,069 | | .039 | | .033 |
| Weir E | | 5.89 | | 4.84 | |
| | 4,585 | | .053 | | .048 |
| Weir G | | 8.33 | | 7.03 | |
| | 1,041 | | .105 | | .105 |
| Weir L | | 9.42 | | 8.12 | |
| | 770 | | .424 | | .310 |
| Weir H | | 12.68 | | 10.51 | |
| | 2,543 | | .210 | | .183 |
| Weir I | | 17.97 | | 15.17 | |
| | 3,926 | | .038 | | .089 |
| Weir J | | 19.45 | | 18.69 | |
| | 3,600 | | .100 | | .060 |
| Weir K | | 23.06 | | 20.85 | |
| | 6,345 | | .268 | | .217 |
| Bridge P | | 40.09 | | 34.60 | |
| | 4,629 | | .095 | | .163 |
| Bridge Q | | 44.49 | | 42.15 | |
| | 6,756 | | .185 | | .167 |
| Bridge No. 2 | | 56.99 | | 53.46 | |

## ARROYO SECO NEAR PASADENA, CAL.

This station, which is located in the SE. ¼ sec. 30, T. 2 N., R. 12 W., at the forest ranger's station in the Angeles National Forest, 5½ miles northwest of Pasadena, was established December 1, 1910.

The staff gage is in two sections, fastened to an alder tree on the right bank, 300 feet southeast of the ranger's cabin. Discharge measurements are made by wading below the gage.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of Arroyo Seco near Pasadena, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-ft.* | 1911. | | *Feet.* | *Sec.-ft.* |
| Dec. 1 | W. V. Hardy | 3.44 | 1.4 | Nov. 3 | F. C. Ebert | 3.14 | 1.6 |
| 1911. | | | | Nov. 3 | Lesley Lee | 3.14 | 1.6 |
| Feb. 21 | W. V. Hardy | 3.78 | 18 | 1912. | | | |
| Mar. 1 | ....do | 3.85 | 22 | Jan. 31 | F. C. Ebert | 3.24 | 2.2 |
| May 2 | ....do | 3.47 | 13 | Mar. 17 | ....do | 3.62 | 20 |
| June 21 | ....do | 3.30 | 4.8 | | | | |

[illegible] 1909–1912.

[illegible]

[illegible]

*Daily discharge, in second-feet, of Arroyo Seco near Pasadena, Cal., for 1910–11.*

| Day. | Dec. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | |
| 1 | 1.4 | 63 | 19 | 7.2 | 3.2 | 1.3 | 0.6 |
| 2 | 1.6 | 62 | 19 | 6.8 | 3.0 | 1.3 | .6 |
| 3 | 1.7 | 62 | 16 | 6.8 | 2.8 | 1.3 | .6 |
| 4 | 1.8 | 60 | 14 | 6.3 | 2.5 | 1.3 | .5 |
| 5 | 2.0 | 54 | 13 | 5.8 | 2.5 | 1.3 | .5 |
| 6 | 2.1 | 44 | 11 | 5.4 | 2.5 | 1.2 | .5 |
| 7 | 2.1 | 39 | 10 | 5.4 | 2.2 | 1.2 | .5 |
| 8 | 2.0 | 34 | 9.0 | 5.0 | 2.0 | 1.2 | .5 |
| 9 | 2.1 | 25 | 8.6 | 5.0 | 1.8 | 1.2 | .6 |
| 10 | 2.0 | 25 | 8.6 | 4.5 | 1.7 | 1.2 | .6 |
| 11 | 2.1 | 24 | 8.1 | 4.2 | 1.6 | 1.2 | .6 |
| 12 | 2.0 | 22 | 8.1 | 4.0 | 1.5 | 1.2 | .6 |
| 13 | 2.3 | 22 | 7.6 | 4.0 | 1.5 | 1.2 | .6 |
| 14 | 2.8 | 21 | 8.6 | 4.0 | 1.5 | 1.3 | .6 |
| 15 | 3.9 | 20 | 8.6 | 4.0 | 1.5 | 1.2 | .6 |
| 16 | 4.2 | 19 | 8.6 | 3.8 | 1.5 | 1.1 | .6 |
| 17 | 4.2 | 18 | 8.6 | 3.8 | 1.4 | 1.2 | .6 |
| 18 | 4.6 | 16 | 8.6 | 3.8 | 1.4 | 1.1 | .6 |
| 19 | 4.6 | 15 | 8.1 | 3.8 | 1.4 | 1.0 | .6 |
| 20 | 5.0 | 14 | 8.0 | 3.8 | 1.5 | 1.0 | .6 |
| 21 | 5.0 | 14 | 7.9 | 3.8 | 1.4 | .8 | .6 |
| 22 | 5.6 | 14 | 7.9 | 3.5 | 1.4 | .8 | .6 |
| 23 | 5.6 | 14 | 7.8 | 3.5 | 1.4 | .8 | .6 |
| 24 | 6.0 | 14 | 7.7 | 3.5 | 1.5 | .8 | .6 |
| 25 | 7.0 | 13 | 7.6 | 3.5 | 1.5 | .8 | .7 |
| 26 | 7.0 | 21 | 7.5 | 3.2 | 1.5 | .8 | .7 |
| 27 | 7.5 | 21 | 7.4 | 3.2 | 1.5 | .8 | .7 |
| 28 | 7.5 | 21 | 7.4 | 3.2 | 1.5 | .7 | 1.0 |
| 29 | 7.0 | 20 | 7.3 | 3.2 | 1.5 | .6 | 60 |
| 30 | 7.0 | 20 | 7.2 | 3.2 | 1.5 | .6 | 31 |
| 31 | 7.5 | ........ | 7.2 | ........ | 1.4 | .6 | ........ |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | 1911. | | | | 1911. | | | |
| 1 | 17 | 2.2 | 1.6 | 11 | 1.7 | 2.5 | 1.9 | 21 | 1.5 | 1.6 | 1.7 |
| 2 | 2.2 | 2.5 | 1.6 | 12 | 1.5 | 2.4 | 1.8 | 22 | 1.5 | 1.5 | 1.6 |
| 3 | 2.0 | 2.0 | 1.6 | 13 | 1.5 | 2.2 | 1.8 | 23 | 1.6 | 1.5 | 1.6 |
| 4 | 2.8 | 1.9 | 1.7 | 14 | 1.9 | 2.0 | 1.8 | 24 | 1.7 | 1.5 | 1.6 |
| 5 | 2.0 | 1.9 | 1.6 | 15 | 1.6 | 1.9 | 1.7 | 25 | 1.7 | 1.4 | 1.6 |
| 6 | 1.9 | 1.9 | 2.2 | 16 | 1.4 | 1.9 | 1.6 | 26 | 1.8 | 1.4 | 1.5 |
| 7 | 2.2 | 1.8 | 2.0 | 17 | 1.4 | 1.8 | 1.6 | 27 | 2.0 | 1.5 | 1.5 |
| 8 | 2.0 | 1.8 | 2.0 | 18 | 1.1 | 1.8 | 1.7 | 28 | 2.5 | 1.5 | 1.5 |
| 9 | 1.9 | 1.7 | 2.0 | 19 | 1.4 | 1.8 | 1.7 | 29 | 2.2 | 1.6 | 1.5 |
| 10 | 1.8 | 2.0 | 2.0 | 20 | 1.4 | 1.7 | 1.7 | 30 | 2.0 | 1.5 | 1.5 |
| | | | | | | | | 31 | 2.2 | ...... | 1.5 |

NOTE.—Daily discharge determined from two fairly well defined rating curves applicable as follows: Dec. 1, 1910, to Mar. 10, 1911, and Mar. 11 to Sept. 30, 1911. No record during Jan. 1 to Mar. 31, 1911. Discharge interpolated on days for which no gage height is given during December, 1910, and Apr. 1 to Dec. 31, 1911. Daily discharge for 1912 withheld until additional data has been secured.

*Monthly discharge of Arroyo Seco near Pasadena, Cal., for 1910–11.*

[Drainage area, 16.4 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| 1910–11. | | | | | | | |
| December | 7.3 | 1.4 | 4.10 | 0.250 | 0.29 | 252 | C. |
| April | 63 | 13 | 27.7 | 1.69 | 1.89 | 1,650 | B. |
| May | 19 | 7.2 | 9.55 | .582 | .67 | 587 | B. |
| June | 7.2 | 3.2 | 4.37 | .266 | .30 | 260 | C. |
| July | 3.2 | 1.4 | 1.78 | .109 | .13 | 109 | D. |
| August | 1.3 | .6 | 1.04 | .063 | .07 | 64 | D. |
| September | 60 | .5 | 3.60 | .220 | .25 | 214 | D. |
| The period | | | | | | 2,589 | |
| 1911. | | | | | | | |
| October | 17 | 1.4 | 2.38 | .145 | .17 | 146 | D. |
| November | 3 | 1.4 | 1.86 | .113 | .13 | 111 | D. |
| December | 2.2 | 1.5 | 1.70 | .104 | .12 | 105 | D. |

MISCELLANEOUS MEASUREMENTS.

The following miscellaneous discharge measurements have been made in the drainage basin of Los Angeles River:

*Miscellaneous measurements in Los Angeles River drainage basin.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | Sec.-ft. |
| June 24, 1898 | Los Angeles River | | Creek below Macy Street | [illegible] |
| Do. | do | | Zanja No. 7 | [illegible] |
| Do. | do | | Diversion below Zanja No. 7 | [illegible] |
| Aug. 10, 1898 | do | | New bridge, Weir B | [illegible] |
| Do. | do | | San Fernando road crossing | [illegible] |
| Do. | do | | North Cahuenga road | [illegible] |
| Do. | do | | Old bridge, No. 4 | [illegible] |
| Do. | do | | Tujunga Creek junction | [illegible] |
| Aug. 15, 1898 | do | | Bridge No. 2, at Narrows | [illegible] |
| Do. | do | | Main supply ditch | [illegible] |
| Do. | do | | Total river at Crystal Springs | [illegible] |
| Jan. 5, 1899 | do | | The Narrows | 57 |
| Feb. 14, 1899 | do | | do | 61 |
| Feb. 25, 1899 | do | | do | 67 |
| Mar. 11, 1899 | do | | do | 63 |
| Mar. 25, 1899 | do | | do | 51 |
| Apr. 29, 1899 | do | | do | 52 |
| May 18, 1899 | do | | do | 58 |
| June 7, 1899 | do | | do | 56 |
| July 18, 1899 | do | | do | 53 |
| Aug. 19, 1899 | do | | do | 57 |
| Aug. 25, 1899 | do | | do | 59 |
| Sept. 20, 1899 | do | | do | 73 |
| Sept. 27, 1899 | do | | do | 54 |
| Oct. 25, 1899 | do | | do | 57 |
| Oct. 31, 1899 | do | | do | 58 |
| Nov. 17, 1899 | do | | do | 59 |
| Nov. 28, 1899 | do | | do | 56 |
| Dec. 13, 1899 | do | | do | 58 |
| Dec. 28, 1899 | do | | do | 58 |
| Sept. 20, 1901 | do | | Bridge No. 2 | 45.9 |
| Mar. 25, 1903 | do | J. F. Danforth | Los Feliz Bridge | 109 |
| Apr. 8, 1903 | do | J. C. Clausen | do | 57 |
| Apr. 13, 1903 | do | O. W. Petersen | do | 23 |
| Apr. 17, 1903 | do | do | do | 64 |
| Jan. 28, 1903 | do | C. A. Miller | Aliso Street Bridge | 65 |
| Apr. 11, 1903 | do | J. C. Clausen | Ninth Street Bridge | 23 |

a Approximate.

*Miscellaneous measurements in Los Angeles River drainage basin*—Continued.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Apr. 18, 1903 | Los Angeles River | O. W. Peterson | Ninth Street Bridge | 106 |
| Apr. 12, 1905 | do | W. B. Clapp | do | 12.7 |
| Apr. 18, 1903 | do | O. W. Peterson | Boyle Avenue | 75 |
| Do | do | do | Opposite Bell station | 73 |
| Apr. 20, 1903 | do | do | Above junction of Rio Hondo | 25 |
| Do | do | do | Below junction of Rio Hondo | 54 |
| Do | do | do | ½ mile above Compton and Clearwater road. | 82 |
| Do | do | do | Opposite Clearwater | 53 |
| Apr. 21, 1903 | do | do | ½ mile above Cerritos road | 39 |
| Do | do | do | 1½ miles below Cerritos road | 77 |
| Do | do | do | Opposite Seabright | 78 |
| Mar. 13, 1905 | do | | Fourth Street Bridge | 4,520 |
| Apr. 12, 1905 | do | | Huron Street | 43 |
| Mar. 13, 1906 | do | | Seventh Street Bridge, a. m. | 850 |
| Do | do | | Seventh Street Bridge, p. m. | 555 |
| Mar. 16, 1906 | do | | do | 75 |
| Mar. 17, 1906 | do | | Seventh Street Bridge, a. m. | 1,200 |
| Do | do | | Seventh Street Bridge, p. m. | 420 |
| Mar. 5, 1907 | do | | do | 3,200 |
| Oct. 9, 1900 | Pacoima Creek | S. G. Bennett | Submerged dam | .09 |
| Aug. 21, 1899 | do | do | Mouth of canyon | .0 |
| Jan. 9, 1901 | do | L. Messmer | do | 50 |
| July 12, 1901 | do | S. G. Bennett | do | .0 |
| Sept. 20, 1901 | do | do | do | .0 |
| Apr. 9, 1903 | do | J. C. Clausen | do | 47 |
| Apr. 18, 1903 | do | do | do | 98 |
| May 5, 1903 | do | do | do | 24 |
| June 5, 1903 | do | W. B. Clapp | do | 8 |
| Sept. 26, 1903 | do | do | do | .0 |
| Apr. 12, 1905 | do | R. S. Hawley | do | 30 |
| Apr. 9, 1903 | do | J. C. Clausen | Southern Pacific R. R. | 32 |
| Apr. 19, 1903 | do | do | do | 57 |
| May 5, 1903 | do | do | do | 16 |
| June 5, 1903 | do | W. B. Clapp | do | .0 |
| Apr. 12, 1905 | do | R. S. Hawley | do | 17.6 |
| May 5, 1903 | do | J. C. Clausen | 1½ miles below Southern Pacific R. R. | .0 |
| Apr. 18, 1903 | do | do | 3 miles below Southern Pacific R. R. | .0 |
| Apr. 12, 1905 | do | R. S. Hawley | do | .0 |
| Aug. 21, 1899 | Tujunga Creek | S. G. Bennett | Head works Monte Vista canal | .44 |
| Oct. 9, 1900 | do | W. W. Cockins | do | .19 |
| Sept. 21, 1901 | do | S. G. Bennett | do | .22 |
| Nov. 21, 1900 | do | do | Southern Pacific R. R. | [a]1,060 |
| Nov. 22, 1900 | do | do | do | 19.2 |
| Apr. 9, 1903 | do | J. C. Clausen | do | 2.0 |
| Apr. 17, 1903 | do | do | do | 124 |
| May 5, 1903 | do | do | do | 0 |
| June 4, 1903 | do | W. B. Clapp | do | 0 |
| Apr. 12, 1905 | do | R. S. Hawley | do | 29 |
| Nov. 22, 1900 | do | S. G. Bennett | 3 miles below Southern Pacific R. R. | .05 |
| Apr. 17, 1903 | do | J. C. Clausen | 1½ miles below Southern Pacific R. R. | .0 |
| Apr. 12, 1905 | do | R. S. Hawley | 2 miles below Southern Pacific R. R. | .0 |
| Apr. 10, 1903 | do | J. C. Clausen | Mouth of canyon | 59 |
| Apr. 17, 1903 | do | do | do | 157 |
| May 5, 1903 | do | do | do | 37 |
| June 4, 1903 | do | W. B. Clapp | do | 12 |
| Sept. 26, 1903 | do | do | do | .1 |
| Apr. 12, 1905 | do | R. S. Hawley | do | 61.0 |
| Aug. 11, 1898 | Tujunga Creek, Little | | do | .05 |
| Aug. 21, 1899 | do | S. G. Bennett | do | .0 |
| July 12, 1901 | do | | do | .0 |
| Apr. 10, 1903 | do | J. C. Clausen | do | 10.0 |
| Apr. 17, 1903 | do | do | do | 27.0 |
| May 5, 1903 | do | do | do | 4.0 |
| June 4, 1903 | do | W. B. Clapp | do | 1.0 |
| Sept. 26, 1903 | do | do | do | .0 |
| Apr. 11, 1905 | do | R. S. Hawley | do | 3.3 |
| Jan. 15, 1901 | Main supply ditch plus Crystal Springs. | W. Mulholland | Above Bellevue reservoir diversion. | 53.9 |
| Apr. 24, 1901 | do | do | do | 51.4 |
| June 4, 1901 | do | do | do | 46.4 |

[a] Calculated from flood marks.

Miscellaneous measurements in Los Angeles River drainage basin—Continued.

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| Jan. [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | [illegible] | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | [illegible] | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | W. B. Clapp | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Jan. [illegible] | do. | do. | do. | [illegible] |
| Feb. [illegible] | do. | do. | do. | [illegible] |
| Feb. [illegible] | do. | do. | do. | [illegible] |
| Feb. [illegible] | do. | do. | do. | [illegible] |
| Feb. [illegible] | do. | do. | do. | [illegible] |
| Feb. [illegible] | do. | do. | do. | [illegible] |
| Feb. [illegible] | do. | do. | do. | [illegible] |
| Mar. [illegible] | do. | do. | do. | [illegible] |
| Apr. [illegible] | do. | do. | do. | [illegible] |
| May [illegible] | do. | do. | do. | [illegible] |
| July [illegible] | do. | T. D. Allen | Near Devils Gates | [illegible] |
| Aug. [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |
| Sept. [illegible] | do. | F. H. Olmsted | do. | [illegible] |
| [illegible] | do. | J. B. Lippincott | do. | 3.44 |
| [illegible] | do. | T. D. Allen | do. | [illegible] |
| May [illegible] | do. | do. | do. | [illegible] |
| July [illegible] | do. | W. B. Clapp | do. | [illegible] |
| Sept. [illegible] | do. | do. | do. | [illegible] |
| Apr. [illegible] | do. | do. | Devils Gate | [illegible] |
| May [illegible] | do. | do. | do. | [illegible] |
| Do. | do. | do. | 1 mile below Devils Gate | [illegible] |
| Apr. [illegible] | do. | do. | Devils Gate | 12.5 |
| Apr. [illegible] | do. | | do. | 9.2 |
| Sept. [illegible] | do. | F. H. Olmsted | Sheep corral, total | [illegible] |
| [illegible] | do. | J. B. Lippincott | | [illegible] |
| May [illegible] | do. | W. B. Clapp | Sheep corral, total | 1.43 |
| June [illegible] | do. | do. | do. | 1.36 |
| June [illegible] | do. | do. | do. | [illegible] |
| [illegible] | do. | do. | do. | [illegible] |

*Miscellaneous measurements in Los Angeles River drainage basin*—Continued.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| July 13, 1899 | Arroyo Seco | W. B. Clapp | Sheep coral, total | 1.30 |
| Sept. 19, 1899 | do | W. W. Cockins, jr. | do | 1.94 |
| Sept. 21, 1899 | do | J. B. Lippincott | do | 1.37 |
| Apr. 13, 1903 | do | W. B. Clapp | do | 4.0 |
| Apr. 17, 1903 | do | do | do | 80 |
| Feb. 6, 1901 | do | S. G. Bennett | Avenue 26 bridge | 270 |
| Jan. 28, 1903 | do | C. A. Miller | do | 274 |
| Mar. 25, 1903 | do | J. F. Danforth | do | 128 |
| Apr. 17, 1903 | do | O. W. Peterson | do | 77 |
| Apr. 13, 1903 | do | W. B. Clapp | Mouth of canyon | 24 |
| Apr. 17, 1903 | do | do | do | 100 |
| May 21, 1903 | do | do | do | 10 |
| Apr. 11, 1905 | do | do | do | 17.1 |
| Apr. 18, 1906 | do | | do | 20 |
| Apr. 17, 1907 | do | | do | 40 |
| May 14, 1907 | do | | do | 18 |
| Apr. 17, 1908 | do | | do | 5 |
| Sept. 16, 1898 | do | | Total flow into Osage Grove Avenue reservoir. | .60 |
| Do | do | | Marengo Improvement Co. reservoir. | 1.47 |
| Jan. 11, 1899 | do | W. B. Clapp | Loughery dam site | 4.17 |
| Apr. 13, 1903 | do | do | Garvanza wagon bridge | .00 |
| Oct. 27, 1905 | do | J. B. Lippincott | Sycamore grove, near Morgan's south line. | .10 |
| Apr. 11, 1905 | do | W. B. Clapp | 1,000 feet above submerged dam of Pasadena Land & Water Co. | 2.60 |
| Apr. 18, 1906 | do | | Submerged dam | .00 |
| July 14, 1908 | do | | 1 mile above junction with Millard Canyon. | .30 |
| Apr. 7, 1910 | do | | Mouth of Millard Canyon, 4 miles north of Pasadena. | 7.7 |
| June 6, 1910 | do | | In flume at intake of North Pasadena Land & Water Co. Total flow of stream. | 2.0 |
| June 28, 1910 | do | | do | 1.2 |
| Jan. 28, 1901 | Aliso Creek | J. B. Lippincott | Chatsworth road crossing | .60 |
| Do | do | do | 2 miles below road crossing | .32 |

a Devils Gate developments including Richardson and Wilson tunnels.

## MALIBU CREEK BASIN.

### MALIBU CREEK NEAR CALABASAS, CAL.

This station was established November 29, 1901, and discontinued December 31, 1906. It was located at Chapman's ranch, 40 miles from Los Angeles, by wagon road, and 8 miles southwest of Calabasas, about one-fourth mile below the mouth of Las Virgenes Creek.

The channel section was poor and subject to change during high water, but was at the only point where an observer could be employed. The excessive cost of visiting the station made it impossible to obtain as many meter measurements as were desired, but the observer was instructed to take float velocities at various gage heights, and these data, with cross sections and slope, were used in addition to meter measurements for computing discharges for use in constructing rating curves and tables. The estimated discharge is only roughly approximate.

The channel is straight for about 600 feet above the station and curved for about 300 feet below. The current is swift. Both banks

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

| | | | | | | |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Malibu Creek near Calabasas, Cal., for 1903–1906*—Contd.

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | |
| 1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.15 | 1.05 | 1.05 |
| 2 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.15 | 1.05 | 1.05 |
| 3 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.15 | 1.05 | ........ |
| 4 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.15 | 1.05 | ........ |
| 5 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.1 | 1.15 | 1.05 | ........ |
| 6 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.1 | 1.15 | 1.05 | ........ |
| 7 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.1 | 1.15 | 1.05 | ........ |
| 8 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.05 | 1.15 | 1.05 | ........ |
| 9 | 1.1 | 1.15 | 1.2 | 1.2 | 1.2 | 1.0 | 1.15 | 1.05 | ........ |
| 10 | 1.1 | 1.15 | 1.2 | 1.2 | 1.6 | 1.0 | 1.15 | 1.05 | ........ |
| 11 | 1.1 | 1.15 | 1.2 | 1.2 | 1.45 | 1.05 | 1.1 | 1.05 | ........ |
| 12 | 1.1 | 1.2 | 1.2 | 1.2 | 1.25 | 1.05 | 1.1 | 1.05 | ........ |
| 13 | 1.1 | 1.2 | 1.2 | 1.2 | 1.15 | 1.05 | 1.1 | 1.05 | ........ |
| 14 | 1.1 | 1.2 | 1.2 | 1.2 | 1.15 | 1.05 | 1.05 | 1.05 | ........ |
| 15 | 1.1 | 1.2 | 1.2 | 1.2 | 1.15 | 1.05 | 1.05 | 1.05 | ........ |
| 16 | 1.1 | 1.2 | 1.2 | 1.3 | 1.15 | 1.05 | 1.05 | 1.05 | ........ |
| 17 | 1.1 | 1.2 | 1.2 | 1.25 | 1.15 | 1.05 | 1.05 | 1.05 | ........ |
| 18 | 1.1 | 1.2 | 1.2 | 1.25 | 1.15 | 1.05 | 1.05 | 1.05 | ........ |
| 19 | 1.1 | 1.2 | 1.2 | 1.2 | 1.15 | 1.15 | 1.05 | 1.05 | ........ |
| 20 | 1.1 | 1.2 | 1.2 | 1.2 | 1.15 | 1.15 | 1.05 | 1.05 | ........ |
| 21 | 1.1 | 1.2 | 1.2 | 1.2 | 1.15 | 1.15 | 1.0 | 1.05 | ........ |
| 22 | 1.1 | 1.2 | 1.2 | 1.2 | 1.15 | 1.15 | 1.0 | 1.05 | ........ |
| 23 | 1.1 | 1.2 | 1.2 | 1.2 | 1.5 | 1.15 | 1.0 | 1.05 | ........ |
| 24 | 1.1 | 1.2 | 1.2 | 1.2 | 1.25 | 1.15 | 1.0 | 1.05 | ........ |
| 25 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.15 | 1.0 | 1.05 | ........ |
| 26 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.15 | 1.0 | 1.05 | ........ |
| 27 | 1.1 | 1.2 | 1.2 | 1.25 | 1.2 | 1.15 | 1.0 | 1.05 | ........ |
| 28 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.15 | 1.05 | 1.05 | ........ |
| 29 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.15 | 1.05 | 1.05 | ........ |
| 30 | 1.1 | 1.2 | 1.2 | ........ | 1.2 | 1.15 | 1.05 | 1.05 | ........ |
| 31 | ........ | 1.2 | 1.2 | ........ | 1.2 | ........ | 1.05 | ........ | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 1 | ....... | 1.0 | 1.15 | 1.2 | 1.2 | 1.1 | 1.5 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 |
| 2 | ....... | 1.0 | 1.15 | 1.2 | 1.3 | 1.1 | 1.25 | .8 | .6 | .5 | .5 | .5 |
| 3 | ....... | 1.0 | 1.2 | 1.2 | 1.6 | 1.1 | 1.2 | .8 | .6 | .5 | .5 | .5 |
| 4 | ....... | 1.0 | 1.2 | 1.2 | 2.85 | 1.1 | 1.2 | .8 | .6 | .5 | .5 | .5 |
| 5 | ....... | 1.0 | 1.2 | 1.2 | 1.85 | 1.1 | 1.2 | .8 | .6 | .5 | .5 | .5 |
| 6 | ....... | 1.0 | 1.2 | 1.2 | 2.1 | 1.1 | 1.25 | .8 | .6 | .5 | .5 | .5 |
| 7 | ....... | 1.0 | 1.2 | 1.2 | 1.3 | 1.1 | 1.25 | 1.3 | .6 | .5 | .5 | .5 |
| 8 | ....... | 1.0 | 1.2 | 1.2 | 1.2 | 1.1 | 1.25 | .9 | .6 | .5 | .5 | .5 |
| 9 | ....... | 1.0 | 1.2 | 1.2 | 1.15 | 1.1 | 1.2 | .9 | .6 | .6 | .5 | .5 |
| 10 | ....... | 1.0 | 1.2 | 1.2 | 1.15 | 1.1 | 1.2 | .9 | .6 | .6 | .5 | .5 |
| 11 | ....... | 1.0 | 1.2 | 1.2 | 1.15 | 1.0 | 1.2 | .9 | .6 | .6 | .5 | .45 |
| 12 | ....... | 1.0 | 1.2 | 1.2 | 1.15 | 7.6 | 1.1 | .9 | .6 | .6 | .5 | .45 |
| 13 | ....... | 1.0 | 1.2 | 1.2 | 1.15 | 4.2 | 1.25 | .9 | .6 | .6 | .5 | .45 |
| 14 | ....... | 1.0 | 1.2 | 1.2 | 1.1 | 3.25 | 1.0 | .7 | .6 | .6 | .5 | .45 |
| 15 | 1.0 | 1.0 | 1.2 | 1.2 | 1.1 | 3.25 | 1.0 | .7 | .6 | .6 | .5 | .45 |
| 16 | 1.0 | 1.0 | 1.2 | 1.2 | 1.8 | 4.75 | 1.0 | .7 | .6 | .6 | .5 | .45 |
| 17 | 1.0 | 1.0 | 1.2 | 1.2 | 1.65 | 3.55 | 1.0 | .7 | .6 | .6 | .5 | .45 |
| 18 | 1.0 | 1.0 | 1.2 | 1.2 | 1.55 | 2.8 | .9 | .7 | .6 | .6 | .5 | .4 |
| 19 | 1.0 | 1.0 | 1.2 | 1.22 | 1.4 | 2.5 | .9 | .7 | .6 | .6 | .5 | .4 |
| 20 | 1.0 | 1.0 | 1.2 | 1.25 | 1.3 | 2.4 | .9 | .7 | .6 | .6 | .5 | .4 |
| 21 | 1.0 | 1.0 | 1.2 | 1.3 | 1.2 | 2.4 | .9 | .7 | .6 | .6 | .5 | .4 |
| 22 | 1.0 | 1.0 | 1.2 | 1.24 | 1.2 | 2.3 | .9 | .7 | .6 | .6 | .5 | .4 |
| 23 | 1.0 | 1.0 | 1.2 | 1.2 | 1.15 | 2.2 | .9 | .7 | .6 | .5 | .5 | .45 |
| 24 | 1.0 | 1.0 | 1.2 | 1.2 | 1.1 | 2.2 | .9 | .7 | .6 | .5 | .5 | .45 |
| 25 | 1.0 | 1.0 | 1.2 | 1.2 | 1.1 | 1.0 | .9 | .7 | .5 | .5 | .5 | .45 |
| 26 | 1.0 | 1.0 | 1.2 | 1.2 | 1.1 | 1.6 | .9 | .7 | .5 | .5 | .5 | .45 |
| 27 | 1.0 | 1.1 | 1.2 | 1.2 | 1.1 | 1.45 | .9 | .7 | .5 | .5 | .5 | .45 |
| 28 | 1.0 | 1.1 | 1.2 | 1.2 | 1.1 | 1.55 | .8 | .6 | .5 | .5 | .5 | .45 |
| 29 | 1.0 | 1.1 | 1.2 | 1.2 | ....... | 1.7 | .8 | .6 | .5 | .5 | .5 | .45 |
| 30 | 1.0 | 1.15 | 1.2 | 1.2 | ....... | 1.7 | .8 | .6 | .5 | .5 | .5 | .45 |
| 31 | 1.0 | ....... | 1.2 | 1.2 | ....... | 1.55 | ....... | .6 | ....... | .5 | .5 | ....... |

[illegible]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | |
| [illegible] | | | | | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
| [illegible] | | | | | | | | 21 | | | |
| | | | | | | | | 22 | | | |
| | | | | | | | | 23 | | | |
| | | | | | | | | 24 | | | |
| | | | | | | | | 25 | | | |
| | | | | | | | | 26 | | | |
| | | | | | | | | 27 | | | |
| | | | | | | | | 28 | | | |
| | | | | | | | | 29 | | | |
| | | | | | | | | 30 | | | |
| | | | | | | | | 31 | | | |

a Estimated.

NOTE.—No record July [illegible] to Oct. [illegible]

*Rating tables for Malibu Creek near Calabasas, Cal.*

January 1 to March 30, 1903.

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.50 | 1.0 | 1.10 | 14 | 1.70 | 50 | 2.30 | 210 |
| .60 | 1.5 | 1.20 | 18 | 1.80 | 62 | 2.40 | 265 |
| .70 | 2.5 | 1.30 | 23 | 1.90 | 75 | 2.50 | 330 |
| .80 | 4.5 | 1.40 | 28 | 2.00 | 98 | | |
| .90 | 7.0 | 1.50 | 34 | 2.10 | 128 | | |
| 1.00 | 10.0 | 1.60 | 41 | 2.20 | 165 | | |

March 31, 1903, to December 31, 1904.

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| 1.00 | 1 | 1.70 | 44 | 2.40 | 265 | 3.10 | 720 |
| 1.10 | 2 | 1.80 | 57 | 2.50 | 330 | 3.20 | 785 |
| 1.20 | 5 | 1.90 | 72 | 2.60 | 395 | 3.30 | 850 |
| 1.30 | 10 | 2.00 | 95 | 2.70 | 460 | 3.40 | 915 |
| 1.40 | 16 | 2.10 | 128 | 2.80 | 525 | 3.50 | 980 |
| 1.50 | 24 | 2.20 | 165 | 2.90 | 590 | | |
| 1.60 | 33 | 2.30 | 210 | 3.00 | 655 | | |

*Monthly discharge of Malibu Creek near Calabasas, Cal., for 1903–1906.*

[Drainage area, 97 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1903.** | | | | | | |
| January | 113 | 2.5 | 8.5 | 0.09 | 0.10 | 523 |
| February | 18 | 10 | 15.7 | .16 | .17 | 872 |
| March | 525 | 10 | 46.0 | .47 | .54 | 2,828 |
| April | 817 | 10 | 120.8 | 1.25 | 1.39 | 7,188 |
| May | 10 | 8 | 9.4 | .10 | .12 | 578 |
| June | 8 | 4 | 5.5 | .06 | .07 | 327 |
| July | 4 | 2 | 2.6 | .03 | .03 | 160 |
| The period | | | | | | 12,500 |
| **1903-4.** | | | | | | |
| November | 2 | 2 | 2.0 | .02 | .02 | 119 |
| December | 5 | 2 | 4.1 | .04 | .05 | 252 |
| January | 5 | 5 | 5.0 | .05 | .06 | 307 |
| February | 10 | 5 | 5.5 | .06 | .06 | 316 |
| March | 33 | 4 | 6.9 | .07 | .08 | 424 |
| April | 5 | 1 | 3.0 | .03 | .03 | 179 |
| May | 4 | 1 | 2.2 | .02 | .02 | 135 |
| June | 1.5 | 1.5 | 1.5 | .02 | .02 | 89 |
| The period | | | | | | 1,820 |
| **1904-5.** | | | | | | |
| October 15-31 | 1 | 1 | [a] 1.0 | .01 | .01 | 61 |
| November | 4 | 1 | 1.2 | .01 | .01 | 71 |
| December | 5 | 4 | 4.9 | .05 | .06 | 301 |
| January | 10 | 5 | 5.4 | .056 | .06 | 332 |
| February | 560 | 2 | 36.1 | .372 | .39 | 2,005 |
| March | 6,800 | 1 | 484 | 4.99 | 5.75 | 29,760 |
| April | 41 | 8 | 14.4 | .148 | .16 | 857 |
| May | 24 | 4 | 7.3 | .075 | .09 | 449 |
| June | 4 | 3 | 3.8 | .039 | .04 | 226 |
| July | 3 | 3 | 3 | .031 | .04 | 184 |
| August | 3 | 3 | 3 | .031 | .04 | 184 |
| September | 3 | 1 | 2.1 | .022 | .02 | 125 |
| The period | | | | | | 34,600 |

*Daily gage height, in feet, of Triunfo Creek near Calabasas, Cal., for 1903–1905*—Con.

| Day. | Feb. | Mar. | Apr. | May. | June. | July. | Day. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | [illegible] | | | | | | |
| 1 | ------ | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 21 | .9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 1.1 |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 1.1 |
| 10 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 25 | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 1.1 |
| 11 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 26 | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 1.1 |
| 12 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 27 | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 1.1 |
| 13 | [illegible] | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 28 | [illegible] | [illegible] | ------ | [illegible] | [illegible] | 1.1 |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 29 | ------ | [illegible] | ------ | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 30 | ------ | [illegible] | ------ | [illegible] | [illegible] | [illegible] |
| | | | | | | | 31 | ------ | [illegible] | ------ | [illegible] | ----- | |

NOTE.—No record [illegible]; creek was dry [illegible].

*Rating tables for Triunfo Creek near Calabasas, Cal.*

[illegible]

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| [illegible] | 1 | 1.30 | [illegible] | [illegible] | 225 | [illegible] | [illegible] |
| .80 | 2 | 1.40 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| .90 | 4 | 1.50 | [illegible] | 2.10 | [illegible] | 2.70 | [illegible] |
| [illegible] | [illegible] | 1.60 | [illegible] | [illegible] | [illegible] | | |
| [illegible] | [illegible] | 1.70 | [illegible] | [illegible] | [illegible] | | |
| [illegible] | 25 | [illegible] | [illegible] | 2.40 | [illegible] | | |

[illegible]

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.30 | 0.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| .40 | 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 4 | [illegible] | [illegible] | 1.70 | [illegible] | 2.30 | [illegible] |
| [illegible] | 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| .70 | 9 | [illegible] | [illegible] | [illegible] | [illegible] | | |
| [illegible] | 14 | 1.40 | [illegible] | [illegible] | 306 | | |

*Monthly discharge of Triunfo Creek near Calabasas, Cal., for 1903–1906.*

[Drainage area, 72 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1903.** | | | | | | |
| January | 23 | 1.5 | 3.3 | 0.05 | 0.06 | 208 |
| February | 12 | 8 | 11.6 | .16 | .17 | 644 |
| March | 373 | 8 | 27.5 | .39 | .45 | 1,691 |
| April | 510 | 8 | 60.0 | .83 | .93 | 3,570 |
| May | 9 | 4 | 7.5 | .10 | .12 | 461 |
| June | 4 | 2 | 3.5 | .05 | .06 | 208 |
| July | 2 | 2 | 2.0 | .03 | .03 | 123 |
| The period | | | | | | 6,900 |
| **1903–4.** | | | | | | |
| November | 2 | 0 | .6 | .01 | .01 | 36 |
| December | 3 | 0 | 2.0 | .03 | .03 | 123 |
| January | 3 | 3 | 3 | .04 | .05 | 184 |
| February | 8 | 3 | 4.1 | .06 | .06 | 236 |
| March | 26 | 2 | 4.8 | .07 | .08 | 295 |
| April | 4 | 0.5 | 1.8 | .02 | .02 | 107 |
| May | 2 | 0 | .6 | .01 | .01 | 37 |
| The period | | | | | | 1,010 |
| **1905.** | | | | | | |
| January | 0 | 0 | 0.0 | 0.0 | 0.0 | 0 |
| February | 410 | 0 | 26.2 | .364 | .38 | 1,455 |
| March | 5,000 | 1 | 353.0 | 4.90 | 5.65 | 21,700 |
| April | 40 | 0 | 11.2 | .156 | .17 | 666 |
| May | 6 | 0 | 1.0 | .014 | .02 | 61 |
| June | 2 | 1 | 1.3 | .018 | .02 | 77 |
| July | 1 | 0 | .97 | .013 | .02 | 60 |
| August | 0 | 0 | .0 | .0 | .0 | 0 |
| September | 0 | 0 | .0 | .0 | .0 | 0 |
| The period | | | | | | 24,000 |
| **1905–6.** | | | | | | |
| October | 0 | 0 | .0 | .0 | .0 | 0 |
| November | 0 | 0 | .0 | .0 | .0 | 0 |
| December | 0 | 0 | .0 | .0 | .0 | 0 |
| January | 0.7 | 0 | 0.2 | .0028 | .003 | 12 |
| February | 10 | 0 | 1.1 | .015 | .02 | 61 |
| March | 2,000 | 6 | 155 | 2.15 | 2.48 | 9,530 |
| April | 55 | 8 | 19.3 | .268 | .30 | 1,150 |
| May | 12 | 5 | 6.9 | .096 | .11 | 424 |
| June | 6 | 6 | 6.0 | .083 | .09 | 357 |
| July | 6 | 3 | 3.6 | .050 | .06 | 221 |
| August | 3 | 0 | 1.7 | .024 | .03 | 105 |
| September | 0 | 0 | 0.0 | .00 | .00 | 0 |
| The year | 2,000 | 0 | 16.2 | .225 | 3.09 | 11,900 |
| **1906.** | | | | | | |
| October | 0 | 0 | 0 | 0.0 | 0.0 | 0 |
| November | 4 | 0 | 1.5 | .021 | .02 | 89 |
| December | 100 | 2 | 10.8 | .150 | .17 | 664 |

NOTE.—Discharge for 1905–6 determined by the indirect method for shifting channels.

## SANTA CLARA RIVER BASIN.

### SANTA CLARA RIVER AT FILLMORE, CAL.

This station, which is located at the highway bridge at Fillmore, in the NW. ¼ sec. 31, T. 4 N., R. 19 W., about 1½ miles above the mouth of Sespe Creek and half a mile southwest of Fillmore, was established August 31, 1911.

[illegible] vertical staff fastened to the piling at the [illegible] [illegible] channel is composed of sand and shifts consi[illegible] [illegible] measurements are made from bridge or by wa[illegible] [illegible] a[illegible] the station from the main river an[illegible] [illegible]. The discharge was computed by the indire[illegible] [illegible] and the results are only approximate.

*[illegible] Santa Clara River at Fillmore, Cal., [illegible]*

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Hydrographer | [illegible] | [illegible] |
| --- | --- | --- | --- | --- | --- | --- | --- |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | F. C. Ebert | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |

[illegible]

*[illegible] Santa Clara River at Fillmore, Cal., [illegible]*

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily discharge, in second-feet, of Santa Clara River at Fillmore, Cal., for 1911–12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | | 36 | 11 | | 39 | 21 | | 41 |
| 2 | | 36 | 12 | | 39 | 22 | | 36 |
| 3 | | 41 | 13 | | 39 | 23 | | 43 |
| 4 | | 43 | 14 | | 39 | 24 | | 43 |
| 5 | | 36 | 15 | | 39 | 25 | | 43 |
| 6 | | 36 | 16 | | 41 | 26 | | 43 |
| 7 | | 36 | 17 | | 36 | 27 | | 43 |
| 8 | | 39 | 18 | | 36 | 28 | | 43 |
| 9 | | 34 | 19 | | 41 | 29 | | 43 |
| 10 | | 39 | 20 | | 45 | 30 | | 43 |
| | | | | | | 31 | 36 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 43 | 26 | 31 | 29 | 29 | 25 | 55 | 34 | 42 |
| 2 | 45 | 26 | 31 | 29 | 29 | 25 | 53 | 31 | 42 |
| 3 | 45 | 26 | 31 | 29 | 29 | 25 | 51 | 34 | 38 |
| 4 | 45 | 26 | 31 | 29 | 21 | 86 | 42 | 34 | 38 |
| 5 | 39 | 26 | 31 | 29 | 21 | 112 | 147 | 34 | 38 |
| 6 | 39 | 26 | 31 | 29 | 25 | 182 | 143 | 34 | 38 |
| 7 | 45 | 27 | 31 | 29 | 25 | 70 | 138 | 42 | 42 |
| 8 | 45 | 27 | 31 | 29 | 25 | 131 | 135 | 46 | 42 |
| 9 | 45 | 27 | 31 | 29 | 21 | 245 | 68 | 46 | 42 |
| 10 | 51 | 27 | 31 | 29 | 21 | 148 | 66 | 46 | 42 |
| 11 | 47 | 27 | 25 | 29 | 21 | 50 | 64 | 38 | 38 |
| 12 | 41 | 27 | 25 | 29 | 21 | 132 | 62 | 34 | 38 |
| 13 | 41 | 28 | 25 | 29 | 21 | 52 | 38 | 34 | 38 |
| 14 | 51 | 28 | 25 | 29 | 21 | 96 | 36 | 34 | 42 |
| 15 | 41 | 28 | 25 | 29 | 21 | 93 | 33 | 34 | 42 |
| 16 | 41 | 28 | 25 | 29 | 21 | 93 | 52 | 34 | 42 |
| 17 | 41 | 28 | 25 | 29 | 21 | 109 | 50 | 34 | 38 |
| 18 | 49 | 28 | 25 | 29 | 21 | 103 | 48 | 34 | 38 |
| 19 | 49 | 29 | 25 | 29 | 21 | 85 | 78 | 28 | 38 |
| 20 | 43 | 29 | 25 | 29 | 21 | 80 | 96 | 28 | 42 |
| 21 | 43 | 29 | 26 | 29 | 21 | 75 | 92 | 38 | 42 |
| 22 | 43 | 29 | 26 | 29 | 21 | 78 | 80 | 38 | 42 |
| 23 | 49 | 29 | 26 | 29 | 21 | 72 | 31 | 38 | 42 |
| 24 | 24 | 29 | 26 | 29 | 21 | 68 | 31 | 38 | 38 |
| 25 | 24 | 30 | 26 | 25 | 21 | 63 | 31 | 38 | 38 |
| 26 | 25 | 30 | 26 | 25 | 21 | 33 | 31 | 38 | 18 |
| 27 | 25 | 30 | 26 | 25 | 21 | 32 | 31 | 38 | 18 |
| 28 | 25 | 30 | 26 | 25 | 21 | 30 | 31 | 38 | 18 |
| 29 | 25 | 30 | 26 | 25 | 21 | 53 | 31 | 38 | 18 |
| 30 | 25 | 30 | 26 | 25 | | 22 | 34 | 38 | 13 |
| 31 | 25 | | 26 | 29 | | 50 | | 42 | |

NOTE.—Daily discharge determined from fairly well defined rating curves and by the indirect method of shifting channels.

*Monthly discharge of Piru Creek near Piru, Cal., for 1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| January | | | [illegible] | [illegible] | [illegible] |
| February | | | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The period | | | | [illegible] | |

a Estimated.

## SESPE CREEK NEAR SESPE, CAL.

This station, which is located at the Southern Pacific Railroad bridge in the NW. ¼ sec. 25, T. 4 N., R. 20 W., 1½ miles above the junction with Santa Clara River and half a mile southeast of Sespe, was established August 31, 1911.

The gage is an inclined staff, in two sections, on the left bank at the bridge. Discharge measurements are made from the railroad bridge or by wading below the gage. The channel is composed of gravel and will shift at high stages.

The Fillmore Irrigation Co.'s canal, which diverts about 4 miles above the station, furnishes water for irrigation and domestic uses at Sespe and Fillmore. On May 16, 1912, this canal was carrying 3.5 second-feet.

The results are considered good.

*Discharge measurements of Sespe Creek near Sespe, Cal., in 1911–12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Aug. 31 | F. C. Ebert | a4.18 | 7.3 | Mar. 12 | F. C. Ebert | 6.33 | [illegible] |
| Oct. 26 | Lasley Lee | 4.20 | 7.0 | 15 | do | 5.53 | [illegible] |
| 1912. | | | | 24 | do | 4.92 | [illegible] |
| Jan. 4 | F. C. Ebert | 4.42 | 19 | Apr. 24 | do | 4.56 | [illegible] |
| 26 | do | 4.34 | 12 | May 13 | do | 4.70 | [illegible] |
| Feb. 1 | do | 4.25 | 9.4 | June 26 | do | 4.16 | [illegible] |
| 24 | do | 4.15 | 5.0 | | | | |

a Point of zero flow about 3.4 feet.

*Daily gage height, in feet, of Sespe Creek near Sespe, Cal., for 1911–12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | | [illegible] | 11 | | 4.22 | 21 | | [illegible] |
| 2 | | [illegible] | 12 | | [illegible] | 22 | | [illegible] |
| 3 | | [illegible] | 13 | | [illegible] | 23 | | 4.25 |
| 4 | | 4.22 | 14 | | [illegible] | 24 | | [illegible] |
| 5 | | [illegible] | 15 | | [illegible] | 25 | | [illegible] |
| 6 | | [illegible] | 16 | | [illegible] | 26 | | 4.30 |
| 7 | | 4.22 | 17 | | [illegible] | 27 | | 4.30 |
| 8 | | 4.22 | 18 | | [illegible] | 28 | | [illegible] |
| 9 | | 4.22 | 19 | | [illegible] | 29 | | [illegible] |
| 10 | | 4.22 | 20 | | [illegible] | 30 | | 4.32 |
| | | | | | | 31 | [illegible] | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.42 |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.42 |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.7 | [illegible] |
| 12 | [illegible] | 4.31 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.7 | [illegible] |
| 13 | [illegible] | 4.31 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.7 | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | 4.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | 4.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | | [illegible] | [illegible] | | [illegible] | | [illegible] | |

NOTE.—During Oct. and Nov., 1911, a retaining wall was being built about [illegible] above the county bridge and water was diverted from the main stream about Nov. [illegible] and [illegible] to [illegible] gage heights not a true index to discharge for these days.

*Daily discharge, in second-feet, of Sespe Creek near Sespe, Cal., for 1911–12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | | [illegible] | 11 | | [illegible] | 21 | | [illegible] |
| 2 | | [illegible] | 12 | | [illegible] | 22 | | [illegible] |
| 3 | | [illegible] | 13 | | [illegible] | 23 | | [illegible] |
| 4 | | [illegible] | 14 | | [illegible] | 24 | | [illegible] |
| 5 | | [illegible] | 15 | | [illegible] | 25 | | [illegible] |
| 6 | | [illegible] | 16 | | [illegible] | 26 | | [illegible] |
| 7 | | [illegible] | 17 | | [illegible] | 27 | | [illegible] |
| 8 | | [illegible] | 18 | | [illegible] | 28 | | [illegible] |
| 9 | | [illegible] | 19 | | [illegible] | 29 | | [illegible] |
| 10 | | [illegible] | 20 | | [illegible] | 30 | | [illegible] |
| | | | | | | 31 | [illegible] | |

*Daily discharge, in second-feet, of Sespe Creek near Sespe, Cal., for 1911–12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

NOTE.—Daily discharge determined from fairly well-defined rating curve applicable as follows: [illegible] [illegible] June 30, 1912. Discharge interpolated Nov. [illegible] and [illegible], 1911.

*Monthly discharge of Sespe Creek near Sespe, Cal., for 1911–12.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | 2,250 | [illegible] | 428 | [illegible] | [illegible] |
| April | [illegible] | [illegible] | 244 | [illegible] | [illegible] |
| May | [illegible] | 21 | [illegible] | [illegible] | [illegible] |
| June | [illegible] | 23 | [illegible] | [illegible] | [illegible] |
| The period | | | | [illegible] | |

## SANTA PAULA CREEK NEAR SANTA PAULA, CAL.

This station, which is just below the mouth of Sisar Creek, at the east boundary of the Ojai grant in Santa Barbara National Forest, about 5½ miles northwest of Santa Paula, and 6 miles above junction [illegible] Santa Clara River, was established October 27, 1911.

[illegible] is a vertical staff fastened to a tree on the left bank [illegible] feet below the mouth of Sisar Creek. The channel is

composed of bowlders and gravel and will shift at high stages. Discharge measurements are made from a highway bridge 1 mile below the gage or by wading near the gage. The drainage area above the station is 33.4 square miles.

The gage-height record was furnished by the United States Forest Service.

*Discharge measurements of Santa Paula Creek near Santa Paula, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Oct. 27 | F. C. Ebert | 2.40 | 4.9 | Mar. 14 | F. C. Ebert | 3.07 | 39 |
| 27 | Lesley Lee | 2.40 | 4.8 | 24 | ....do | 2.70 | 17 |
| 1912. | | | | Apr. 24 | ....do | 2.88 | 26 |
| Jan. 6 | F. C. Ebert | 2.43 | 4.9 | May 14 | ....do | 2.62 | 13 |
| Feb. 2 | ....do | 2.41 | 4.7 | June 25 | ....do | 2.39 | 6.3 |

*Daily gage height, in feet, of Santa Paula Creek near Santa Paula, Cal., for 1912.*

| Day. | Mar. | Apr. | May. | June. | Day. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 2.7 | 2.8 | 2.6 | 16 | | 3.0 | 2.7 | 2.8 |
| 2 | | 2.75 | 2.8 | 2.6 | 17 | | 3.2 | 2.7 | 2.8 |
| 3 | | 2.7 | 2.8 | 2.6 | 18 | | 3.5 | 2.7 | 2.8 |
| 4 | | 2.75 | 2.7 | 2.6 | 19 | | 3.0 | 2.6 | 2.8 |
| 5 | | 2.7 | 2.8 | 2.6 | 20 | | 3.0 | 2.6 | 2.8 |
| 6 | | 2.7 | 2.9 | 2.6 | 21 | | 3.0 | 2.6 | 2.8 |
| 7 | | 2.7 | 2.7 | 2.5 | 22 | | 3.9 | 2.6 | 2.8 |
| 8 | | 2.7 | 2.7 | 2.5 | 23 | | 3.0 | 2.6 | 2.5 |
| 9 | | 3.5 | 2.7 | 2.5 | 24 | 2.7 | 3.9 | 2.6 | 2.4 |
| 10 | | 4.1 | 2.7 | 2.5 | 25 | 2.8 | 2.9 | 2.65 | 2.45 |
| 11 | | 3.7 | 2.7 | 2.5 | 26 | 3.0 | 2.8 | 2.65 | 2.4 |
| 12 | | 3.0 | 2.7 | 2.5 | 27 | 2.9 | 2.9 | 2.6 | 2.4 |
| 13 | | 2.8 | 2.75 | 2.45 | 28 | 2.8 | 2.8 | 2.6 | 2.4 |
| 14 | | 2.8 | 2.7 | 2.5 | 29 | 2.8 | 2.8 | 2.6 | 2.4 |
| 15 | | 2.7 | 2.7 | 2.5 | 30 | 2.7 | 2.8 | 2.6 | 2.4 |
| | | | | | 31 | 2.0 | | 2.6 | |

NOTE.—Dec. 31, 1911, gage height was 2.45 feet.

*Daily discharge, in second-feet, of Santa Paula Creek near Santa Paula, Cal., for 1912.*

| Day. | Mar. | Apr. | May. | June. | Day. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 17 | 22 | 12 | 16 | | 34 | 17 | 8 |
| 2 | | 20 | 22 | 12 | 17 | | 60 | 17 | 8 |
| 3 | | 17 | 22 | 12 | 18 | | 80 | 17 | 8 |
| 4 | | 20 | 17 | 12 | 19 | | 34 | 12 | 8 |
| 5 | | 17 | 22 | 12 | 20 | | 34 | 12 | 8 |
| 6 | | 17 | 28 | 12 | 21 | | 34 | 12 | 8 |
| 7 | | 17 | 17 | 8 | 22 | | 130 | 12 | 8 |
| 8 | | 17 | 17 | 8 | 23 | | 34 | 12 | 8 |
| 9 | | 80 | 17 | 8 | 24 | 17 | 130 | 12 | 5 |
| 10 | | 158 | 17 | 8 | 25 | 22 | 28 | 14 | 6 |
| 11 | | 104 | 17 | 8 | 26 | 34 | 22 | 14 | 5 |
| 12 | | 34 | 17 | 8 | 27 | 28 | 28 | 12 | 5 |
| 13 | | 22 | 20 | 6 | 28 | 22 | 22 | 12 | 5 |
| 14 | | 22 | 17 | 8 | 29 | 22 | 22 | 12 | 5 |
| 15 | | 17 | 17 | 8 | 30 | 17 | 22 | 12 | 5 |
| | | | | | 31 | 17 | | 12 | |

NOTE.—Daily discharge determined from a rating curve well defined between 10 and 80 second-[illegible]

*Daily gage height, in feet, of Triunfo Creek, near Calabasas, Cal., for 1905–[illegible]*

| Day. | Feb. | Mar. | Apr. | May. | June. | July. | Day. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | | 1905. | | | | | | |
| 1 | | 0.5 | 1.3 | ...... | 1.3 | 1.0 | 16 | 1.65 | 2.3 | 1.5 | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | .5 | 1.5 | ...... | 1.3 | 1.1 | 17 | 1.45 | 2.1 | 1.5 | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | .5 | 1.5 | ...... | 1.3 | 1.1 | 18 | 1.3 | 2.6 | 1.5 | [illegible] | [illegible] | [illegible] |
| 4 | 2.15 | .5 | 1.5 | ...... | 1.3 | 1.1 | 19 | 1.2 | 2.25 | 1.4 | [illegible] | [illegible] | [illegible] |
| 5 | 1.45 | .5 | 1.5 | ...... | 1.3 | 1.1 | 20 | 1.1 | 1.2 | 1.4 | [illegible] | [illegible] | [illegible] |
| 6 | 2.2 | .5 | 1.5 | ...... | 1.3 | 1.1 | 21 | .9 | 1.2 | 1.4 | [illegible] | [illegible] | [illegible] |
| 7 | 1.65 | .5 | 1.6 | 1.4 | 1.3 | 1.1 | 22 | .85 | 1.2 | 1.4 | [illegible] | [illegible] | [illegible] |
| 8 | 1.0 | .5 | 1.6 | .8 | 1.3 | 1.1 | 23 | .8 | 1.1 | ...... | [illegible] | [illegible] | [illegible] |
| 9 | .9 | .5 | 1.6 | .4 | 1.3 | 1.2 | 24 | .8 | 2.2 | ...... | [illegible] | [illegible] | [illegible] |
| 10 | .7 | .45 | 1.5 | ...... | 1.3 | 1.2 | 25 | .7 | 1.6 | ...... | [illegible] | [illegible] | [illegible] |
| 11 | .55 | .45 | 1.55 | ...... | 1.25 | 1.2 | 26 | .7 | 1.4 | ...... | [illegible] | [illegible] | [illegible] |
| 12 | .5 | 6.0 | 1.5 | ...... | 1.25 | 1.2 | 27 | .7 | 1.4 | ...... | [illegible] | [illegible] | [illegible] |
| 13 | .5 | 2.55 | 1.5 | ...... | 1.25 | 1.2 | 28 | .6 | 1.3 | ...... | [illegible] | [illegible] | [illegible] |
| 14 | .3 | 2.15 | 1.5 | 1.2 | 1.25 | 1.2 | 29 | ...... | 1.4 | ...... | [illegible] | [illegible] | [illegible] |
| 15 | .3 | 2.05 | 1.5 | 1.2 | 1.25 | 1.2 | 30 | ...... | 1.4 | ...... | [illegible] | [illegible] | [illegible] |
| | | | | | | | 31 | ...... | 1.4 | ...... | [illegible] | | |

NOTE.—No record Aug. 1 to Oct. 31, 1903; creek was dry Nov. 1–20, 1903, May [illegible], [illegible] Feb. [illegible], Apr. 21 to May 6, May 10–13, and Aug. 1 to Dec. 31, 1905.

*Rating tables for Triunfo Creek near Calabasas, Cal.*

**January 1 to March [illegible], [illegible].**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.70 | 1 | 1.30 | [illegible] | 1.90 | 225 | 2.50 | [illegible] |
| .80 | 2 | 1.40 | 35 | 2.00 | 280 | 2.60 | [illegible] |
| .90 | 4 | 1.50 | [illegible] | 2.10 | [illegible] | 2.70 | [illegible] |
| 1.00 | 8 | 1.60 | [illegible] | 2.20 | [illegible] | | |
| 1.10 | 16 | 1.70 | [illegible] | 2.30 | [illegible] | | |
| 1.20 | 25 | 1.80 | [illegible] | 2.40 | [illegible] | | |

**March [illegible], [illegible], to December [illegible], [illegible].**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 0.50 | 0.3 | [illegible] | [illegible] | 1.30 | [illegible] | 2.10 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 1.40 | [illegible] | 2.20 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 1.70 | [illegible] | 2.30 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.40 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| [illegible] | 14 | [illegible] | [illegible] | 2.10 | [illegible] | | |

*Monthly discharge of Triunfo Creek near Calabasas, Cal., for 1903–1906.*

[Drainage area, 72 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1903.** | | | | | | |
| January | 23 | 1.5 | 3.3 | 0.05 | 0.06 | 203 |
| February | 12 | 8 | 11.6 | .16 | .17 | 644 |
| March | 373 | 8 | 27.5 | .39 | .45 | 1,691 |
| April | 510 | 8 | 60.0 | .83 | .93 | 3,570 |
| May | 9 | 4 | 7.5 | .10 | .12 | 461 |
| June | 4 | 2 | 3.5 | .05 | .06 | 208 |
| July | 2 | 2 | 2.0 | .03 | .03 | 123 |
| The period | | | | | | 6,900 |
| **1903–4.** | | | | | | |
| November | 2 | 0 | .6 | .01 | .01 | 36 |
| December | 3 | 0 | 2.0 | .03 | .03 | 123 |
| January | 3 | 3 | 3 | .04 | .05 | 184 |
| February | 8 | 3 | 4.1 | .06 | .06 | 236 |
| March | 26 | 2 | 4.8 | .07 | .08 | 295 |
| April | 4 | 0.5 | 1.8 | .02 | .02 | 107 |
| May | 2 | 0 | .6 | .01 | .01 | 37 |
| The period | | | | | | 1,010 |
| **1905.** | | | | | | |
| January | 0 | 0 | 0.0 | 0.0 | 0.0 | 0 |
| February | 410 | 0 | 26.2 | .364 | .38 | 1,455 |
| March | 5,000 | 1 | 353.0 | 4.90 | 5.65 | 21,700 |
| April | 40 | 0 | 11.2 | .156 | .17 | 666 |
| May | 6 | 0 | 1.0 | .014 | .02 | 61 |
| June | 2 | 1 | 1.3 | .018 | .02 | 77 |
| July | 1 | 0 | .97 | .013 | .02 | 60 |
| August | 0 | 0 | .0 | .0 | .0 | 0 |
| September | 0 | 0 | .0 | .0 | .0 | 0 |
| The period | | | | | | 24,000 |
| **1905–6.** | | | | | | |
| October | 0 | 0 | .0 | .0 | .0 | 0 |
| November | 0 | 0 | .0 | .0 | .0 | 0 |
| December | 0 | 0 | .0 | .0 | .0 | 0 |
| January | 0.7 | 0 | 0.2 | .0028 | .003 | 12 |
| February | 10 | 0 | 1.1 | .015 | .02 | 61 |
| March | 2,000 | 6 | 155 | 2.15 | 2.48 | 9,530 |
| April | 55 | 8 | 19.3 | .268 | .30 | 1,150 |
| May | 12 | 5 | 6.9 | .096 | .11 | 424 |
| June | 6 | 6 | 6.0 | .083 | .09 | 357 |
| July | 6 | 3 | 3.6 | .050 | .06 | 221 |
| August | 3 | 0 | 1.7 | .024 | .03 | 105 |
| September | 0 | 0 | 0.0 | .00 | .00 | 0 |
| The year | 2,000 | 0 | 16.2 | .225 | 3.09 | 11,900 |
| **1906.** | | | | | | |
| October | 0 | 0 | 0 | 0.0 | 0.0 | 0 |
| November | 4 | 0 | 1.5 | .021 | .02 | 89 |
| December | 100 | 2 | 10.8 | .150 | .17 | 664 |

NOTE.—Discharge for 1905–6 determined by the indirect method for shifting channels.

## SANTA CLARA RIVER BASIN.

### SANTA CLARA RIVER AT FILLMORE, CAL.

This station, which is located at the highway bridge at Fillmore, in the NW. ¼ sec. 31, T. 4 N., R. 19 W., about 1½ miles above the mouth of Sespe Creek and half a mile southwest of Fillmore, was established August 31, 1911.

[illegible] at the right end [illegible] considerable [illegible] by wading. [illegible] and tributaries [illegible] the indirect [illegible] approximate.

[illegible]

*Daily discharge, in second-feet, of Santa Clara River at Fillmore, Cal., for 1911-12.*

| Day. | Aug. | Sept. |
|---|---|---|
| 1911. | | |
| 1 | | 36 |
| 2 | | 36 |
| 3 | | 41 |
| 4 | | 43 |
| 5 | | 36 |
| 6 | | 36 |
| 7 | | 36 |
| 8 | | 39 |
| 9 | | 34 |
| 10 | | 39 |
| 11 | | 39 |
| 12 | | 39 |
| 13 | | 39 |
| 14 | | 39 |
| 15 | | 39 |
| 16 | | 41 |
| 17 | | 36 |
| 18 | | 36 |
| 19 | | 41 |
| 20 | | 45 |
| 21 | | 41 |
| 22 | | 36 |
| 23 | | 43 |
| 24 | | 43 |
| 25 | | 43 |
| 26 | | 43 |
| 27 | | 43 |
| 28 | | 43 |
| 29 | | 43 |
| 30 | | 43 |
| 31 | 36 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 43 | 26 | 31 | 29 | 29 | 25 | 55 | 34 | 42 |
| 2 | 45 | 26 | 31 | 29 | 29 | 25 | 53 | 31 | 42 |
| 3 | 45 | 26 | 31 | 29 | 29 | 25 | 51 | 34 | 38 |
| 4 | 45 | 26 | 31 | 29 | 21 | 86 | 42 | 34 | 38 |
| 5 | 39 | 26 | 31 | 29 | 21 | 112 | 147 | 34 | 38 |
| 6 | 39 | 26 | 31 | 29 | 25 | 182 | 143 | 34 | 38 |
| 7 | 45 | 27 | 31 | 29 | 25 | 70 | 138 | 42 | 42 |
| 8 | 45 | 27 | 31 | 29 | 25 | 131 | 135 | 46 | 42 |
| 9 | 45 | 27 | 31 | 29 | 21 | 245 | 68 | 46 | 42 |
| 10 | 51 | 27 | 31 | 29 | 21 | 148 | 66 | 46 | 42 |
| 11 | 47 | 27 | 25 | 29 | 21 | 50 | 64 | 38 | 38 |
| 12 | 41 | 27 | 25 | 29 | 21 | 132 | 62 | 34 | 38 |
| 13 | 41 | 28 | 25 | 29 | 21 | 52 | 38 | 34 | 38 |
| 14 | 51 | 28 | 25 | 29 | 21 | 95 | 36 | 34 | 42 |
| 15 | 41 | 28 | 25 | 29 | 21 | 93 | 33 | 34 | 42 |
| 16 | 41 | 28 | 25 | 29 | 21 | 93 | 52 | 34 | 42 |
| 17 | 41 | 28 | 25 | 29 | 21 | 109 | 50 | 34 | 38 |
| 18 | 49 | 28 | 25 | 29 | 21 | 103 | 48 | 34 | 38 |
| 19 | 49 | 29 | 25 | 29 | 21 | 85 | 78 | 28 | 38 |
| 20 | 43 | 29 | 25 | 29 | 21 | 80 | 95 | 28 | 42 |
| 21 | 43 | 29 | 26 | 29 | 21 | 75 | 92 | 38 | 42 |
| 22 | 43 | 29 | 26 | 29 | 21 | 78 | 80 | 38 | 42 |
| 23 | 49 | 29 | 26 | 29 | 21 | 72 | 31 | 38 | 42 |
| 24 | 24 | 29 | 26 | 29 | 21 | 68 | 31 | 38 | 38 |
| 25 | 24 | 30 | 26 | 25 | 21 | 63 | 31 | 38 | 38 |
| 26 | 25 | 30 | 26 | 25 | 21 | 33 | 31 | 38 | 18 |
| 27 | 25 | 30 | 26 | 25 | 21 | 32 | 31 | 38 | 18 |
| 28 | 25 | 30 | 26 | 25 | 21 | 30 | 31 | 38 | 18 |
| 29 | 25 | 30 | 26 | 25 | 21 | 53 | 31 | 38 | 18 |
| 30 | 25 | 30 | 26 | 25 | | 22 | 34 | 38 | 13 |
| 31 | 25 | | 26 | 29 | | 50 | | 42 | |

NOTE.—Daily discharge determined from fairly well defined rating curves and by the indirect method of shifting channels.

[illegible] for 1912.

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | [illegible] |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| [illegible] | | | [illegible] | [illegible] | [illegible] |
| [illegible] | | | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | 2.14 | |

[illegible]

## [illegible]

[illegible] Southern Pacific [illegible] miles [illegible] southeast [illegible]

[illegible]

[illegible]

*Daily gage height, in feet, of Sespe Creek near Sespe, Cal., for 1911–12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | | 4.20 | 11 | | 4.22 | 21 | | 4.20 |
| 2 | | 4.20 | 12 | | 4.25 | 22 | | 4.20 |
| 3 | | 4.20 | 13 | | 4.25 | 23 | | 4.25 |
| 4 | | 4.22 | 14 | | 4.25 | 24 | | 4.30 |
| 5 | | 4.20 | 15 | | 4.28 | 25 | | 4.30 |
| 6 | | 4.20 | 16 | | 4.28 | 26 | | 4.30 |
| 7 | | 4.22 | 17 | | 4.28 | 27 | | 4.30 |
| 8 | | 4.22 | 18 | | 4.28 | 28 | | 4.30 |
| 9 | | 4.22 | 19 | | 4.20 | 29 | | 4.30 |
| 10 | | 4.22 | 20 | | 4.20 | 30 | | 4.32 |
| | | | | | | 31 | 4.18 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 4.38 | 4.00 | 4.33 | 4.45 | 4.3 | 4.2 | 4.95 | 4.8 | 4.42 |
| 2 | 4.35 | 3.90 | 4.35 | 4.45 | 4.28 | 4.22 | 4.92 | 4.8 | 4.42 |
| 4 | 4.35 | 3.83 | 4.33 | 4.45 | 4.28 | 4.25 | 4.9 | 4.8 | 4.4 |
| 4 | 4.33 | 3.90 | 4.35 | 4.45 | 4.28 | 5.2 | 4.85 | 4.75 | 4.4 |
| 5 | 4.33 | 3.93 | 4.36 | 4.43 | 4.28 | 6.5 | 4.82 | 4.75 | 4.35 |
| 6 | 4.33 | 3.95 | 4.40 | 4.43 | 4.28 | 5.68 | 4.8 | 4.8 | 4.35 |
| 7 | 4.30 | 4.25 | 4.45 | 4.43 | 4.28 | 6.6 | 4.75 | 4.9 | 4.35 |
| 8 | 4.30 | 4.28 | 4.50 | 4.43 | 4.28 | 6.5 | 4.95 | 4.9 | 4.32 |
| 9 | 4.30 | 4.28 | 4.45 | 4.42 | 4.28 | 5.7 | 6.0 | 4.85 | 4.3 |
| 10 | 4.30 | 4.28 | 4.45 | 4.42 | 4.28 | 6.2 | 6.2 | 4.8 | 4.3 |
| | 4.28 | 4.28 | 4.45 | 4.43 | 4.28 | 5.4 | 6.4 | 4.7 | 4.25 |
| | 4.28 | 4.10 | 4.45 | 4.45 | 4.28 | 6.0 | 5.8 | 4.7 | 4.22 |
| | 4.28 | 4.10 | 4.43 | 4.42 | 4.28 | 6.3 | 5.6 | 4.7 | 4.22 |
| | 4.40 | 4.35 | 4.43 | 4.42 | 4.28 | 5.6 | 5.5 | 4.65 | 4.2 |
| | 4.30 | 4.40 | 4.48 | 4.42 | 4.28 | 5.5 | 5.4 | 4.65 | 4.2 |
| | 4.33 | 4.38 | 4.45 | 4.4 | 4.28 | 5.5 | 5.4 | 4.65 | 4.15 |
| | 4.33 | 4.35 | 4.43 | 4.4 | 4.25 | 5.4 | 5.45 | 4.65 | 4.15 |
| | 4.28 | 4.35 | 4.40 | 4.38 | 4.25 | 5.3 | 5.35 | 4.62 | 4.12 |
| | 4.25 | 4.38 | 4.40 | 4.35 | 4.25 | 5.2 | 5.3 | 4.62 | 4.12 |
| | 4.22 | 4.36 | 4.43 | 4.35 | 4.25 | 5.15 | 5.35 | 4.6 | 4.1 |
| | 4.20 | 4.36 | 4.42 | 4.35 | 4.25 | 5.1 | 5.2 | 4.6 | 4.1 |
| | 4.20 | 4.33 | 4.45 | 4.35 | 4.25 | 5.02 | 5.1 | 4.58 | 4.05 |
| | 4.20 | 4.33 | 4.45 | 4.35 | 4.25 | 5.0 | 5.05 | 4.55 | 4.05 |
| | 4.20 | 4.33 | 4.43 | 4.35 | 4.25 | 4.92 | 4.9 | 4.55 | 4.05 |
| | 4.18 | 4.30 | 4.43 | 4.38 | 4.25 | 4.95 | 4.9 | 4.6 | 4.05 |
| | 4.20 | 4.33 | 4.43 | 4.38 | 4.22 | 5.02 | 4.85 | 4.6 | 4.05 |
| | 4.25 | 4.33 | 4.45 | 4.38 | 4.22 | 5.1 | 4.85 | 4.55 | 4.02 |
| | 4.28 | 4.30 | 4.45 | 4.35 | 4.2 | 5.05 | 4.85 | 4.55 | 4.02 |
| | 4.30 | 4.33 | 4.45 | 4.32 | 4.2 | 5.05 | 4.85 | 4.52 | 4.02 |
| | 4.30 | 4.23 | 4.45 | 4.32 | | 5.0 | 4.85 | 4.5 | 4.0 |
| | 4.28 | | 4.43 | 4.3 | | 4.95 | | 4.45 | |

Note.—During Oct. and Nov., 1911, a retaining wall was being built about one-fourth mile above the nty bridge and water was diverted from the main stream about Nov. 1-6 and 12-13. Gage heights t a true index to discharge for these days.

*Daily discharge, in second-feet, of Sespe Creek near Sespe, Cal., for 1911–12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| | | 7.0 | 11 | | 7.9 | 21 | | 7.0 |
| | | 7.0 | 12 | | 9.2 | 22 | | 7.0 |
| | | 7.0 | 13 | | 9.2 | 23 | | 9.2 |
| | | 7.9 | 14 | | 9.2 | 24 | | 11 |
| | | 7.0 | 15 | | 10 | 25 | | 11 |
| | | 7.0 | 16 | | 10 | 26 | | 11 |
| | | 7.9 | 17 | | 10 | 27 | | 11 |
| | | 7.9 | 18 | | 10 | 28 | | 11 |
| | | 7.9 | 19 | | 7.0 | 29 | | 11 |
| | | 7.9 | 20 | | 7.0 | 30 | | 12 |
| | | | | | | 31 | 6.4 | |

*Daily gage height, in feet, in Triunfo Creek, near Calabasas, Cal., for 1903–1905—Con.*

| Day. | Feb. | Mar. | Apr. | May. | June. | July. | Day. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905. | | | | | | | 1905. | | | | | | |
| 1 | | 0.5 | 1.3 | ...... | 1.3 | 1.0 | 16 | 1.65 | 3.3 | 1.5 | 1.2 | 1.35 | 1.2 |
| 2 | 0.75 | .5 | 1.5 | ...... | 1.3 | 1.1 | 17 | 1.45 | 3.1 | 1.5 | 1.2 | 1.35 | 1.2 |
| 3 | .9 | .5 | 1.5 | ...... | 1.3 | 1.1 | 18 | 1.3 | 2.6 | 1.5 | 1.2 | 1.2 | 1.2 |
| 4 | 2.15 | .5 | 1.5 | ...... | 1.3 | 1.1 | 19 | 1.2 | 2.25 | 1.4 | 1.2 | 1.2 | 1.2 |
| 5 | 1.65 | .5 | 1.5 | ...... | 1.3 | 1.1 | 20 | 1.1 | 1.2 | 1.4 | 1.2 | 1.2 | 1.2 |
| 6 | 2.2 | .5 | 1.5 | ...... | 1.3 | 1.1 | 21 | .9 | 1.2 | 1.4 | 1.2 | 1.2 | 1.2 |
| 7 | 1.65 | .5 | 1.6 | 1.4 | 1.3 | 1.1 | 22 | .85 | 1.2 | 1.4 | 1.2 | 1.2 | 1.2 |
| 8 | 1.0 | .5 | 1.6 | .8 | 1.3 | 1.1 | 23 | .8 | 1.1 | ...... | 1.2 | 1.2 | 1.1 |
| 9 | .9 | .5 | 1.6 | .4 | 1.3 | 1.2 | 24 | .8 | 2.2 | ...... | 1.2 | 1.2 | 1.1 |
| 10 | .7 | .45 | 1.5 | ...... | 1.3 | 1.2 | 25 | .7 | 1.5 | ...... | 1.2 | 1.0 | 1.1 |
| 11 | .55 | .45 | 1.55 | ...... | 1.25 | 1.2 | 26 | .7 | 1.4 | ...... | 1.3 | 1.0 | 1.1 |
| 12 | .5 | 6.0 | 1.5 | ...... | 1.25 | 1.2 | 27 | .7 | 1.4 | ...... | 1.3 | 1.0 | 1.1 |
| 13 | .5 | 2.55 | 1.5 | ...... | 1.25 | 1.2 | 28 | .6 | 1.3 | ...... | 1.3 | 1.0 | 1.1 |
| 14 | .3 | 2.15 | 1.5 | 1.2 | 1.25 | 1.2 | 29 | ...... | 1.4 | ...... | 1.3 | 1.0 | 1.1 |
| 15 | .3 | 2.05 | 1.5 | 1.2 | 1.25 | 1.2 | 30 | ...... | 1.4 | ...... | 1.3 | 1.0 | [illegible] |
| | | | | | | | 31 | ...... | 1.4 | ...... | 1.3 | ...... | |

NOTE.—No record Aug. 1 to Oct. 31, 1903; creek was dry Nov. 1–20, 1903, May 21, 1904, to Feb. 1, 1905, Apr. 23 to May 6, May 10–13, and Aug. 1 to Dec. 31, 1905.

*Rating tables for Triunfo Creek near Calabasas, Cal.*

**January 1 to March 30, 1903.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 0.70 | 1 | 1.30 | 38 | 1.90 | 225 | 2.50 | 775 |
| .80 | 2 | 1.40 | 55 | 2.00 | 280 | 2.60 | 895 |
| .90 | 4 | 1.50 | 76 | 2.10 | 347 | 2.70 | 1,015 |
| 1.00 | 8 | 1.60 | 102 | 2.20 | 435 | | |
| 1.10 | 16 | 1.70 | 136 | 2.30 | 545 | | |
| 1.20 | 25 | 1.80 | 177 | 2.40 | 680 | | |

**March 31, 1903, to December 31, 1905.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 0.30 | 0.5 | 0.9 | 19 | 1.50 | 101 | 2.10 | 373 |
| .40 | 2 | 1.00 | 28 | 1.60 | 129 | 2.20 | 450 |
| .50 | 4 | 1.10 | 35 | 1.70 | 162 | 2.30 | 550 |
| .60 | 6 | 1.20 | 46 | 1.80 | 200 | 2.40 | 670 |
| .70 | 9 | 1.30 | 60 | 1.90 | 250 | | |
| .80 | 14 | 1.40 | 78 | 2.00 | 305 | | |

*Monthly discharge of Triunfo Creek near Calabasas, Cal., for 1903–1906.*

[Drainage area, 72 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1903.** | | | | | | |
| January | 23 | 1.5 | 3.3 | 0.05 | 0.06 | 203 |
| February | 12 | 8 | 11.6 | .16 | .17 | 644 |
| March | 373 | 8 | 27.5 | .39 | .45 | 1,691 |
| April | 510 | 8 | 60.0 | .83 | .93 | 3,570 |
| May | 9 | 4 | 7.5 | .10 | .12 | 461 |
| June | 4 | 2 | 3.5 | .05 | .06 | 208 |
| July | 2 | 2 | 2.0 | .03 | .03 | 123 |
| The period | | | | | | 6,900 |
| **1903–4.** | | | | | | |
| November | 2 | 0 | .6 | .01 | .01 | 36 |
| December | 3 | 0 | 2.0 | .03 | .03 | 123 |
| January | 3 | 3 | 3 | .04 | .05 | 184 |
| February | 8 | 3 | 4.1 | .06 | .06 | 236 |
| March | 26 | 2 | 4.8 | .07 | .08 | 295 |
| April | 4 | 0.5 | 1.8 | .02 | .02 | 107 |
| May | 2 | 0 | .6 | .01 | .01 | 37 |
| The period | | | | | | 1,010 |
| **1905.** | | | | | | |
| January | 0 | 0 | 0.0 | 0.0 | 0.0 | 0 |
| February | 410 | 0 | 26.2 | .364 | .38 | 1,455 |
| March | 5,000 | 1 | 353.0 | 4.90 | 5.65 | 21,700 |
| April | 40 | 0 | 11.2 | .156 | .17 | 666 |
| May | 6 | 0 | 1.0 | .014 | .02 | 61 |
| June | 2 | 1 | 1.3 | .018 | .02 | 77 |
| July | 1 | 0 | .97 | .013 | .02 | 60 |
| August | 0 | 0 | .0 | .0 | .0 | 0 |
| September | 0 | 0 | .0 | .0 | .0 | 0 |
| The period | | | | | | 24,000 |
| **1905–6.** | | | | | | |
| October | 0 | 0 | .0 | .0 | .0 | 0 |
| November | 0 | 0 | .0 | .0 | .0 | 0 |
| December | 0 | 0 | .0 | .0 | .0 | 0 |
| January | 0.7 | 0 | 0.2 | .0028 | .003 | 12 |
| February | 10 | 0 | 1.1 | .015 | .02 | 61 |
| March | 2,000 | 6 | 155 | 2.15 | 2.48 | 9,530 |
| April | 55 | 8 | 19.3 | .268 | .30 | 1,150 |
| May | 12 | 5 | 6.9 | .096 | .11 | 424 |
| June | 6 | 6 | 6.0 | .083 | .09 | 357 |
| July | 6 | 3 | 3.6 | .050 | .06 | 221 |
| August | 3 | 0 | 1.7 | .024 | .03 | 105 |
| September | 0 | 0 | 0.0 | .00 | .00 | 0 |
| The year | 2,000 | 0 | 16.2 | .225 | 3.09 | 11,900 |
| **1906.** | | | | | | |
| October | 0 | 0 | 0 | 0.0 | 0.0 | 0 |
| November | 4 | 0 | 1.5 | .021 | .02 | 89 |
| December | 100 | 2 | 10.8 | .150 | .17 | 664 |

NOTE.—Discharge for 1905–6 determined by the indirect method for shifting channels.

## SANTA CLARA RIVER BASIN.

### SANTA CLARA RIVER AT FILLMORE, CAL.

This station, which is located at the highway bridge at Fillmore, in the NW. ¼ sec. 31, T. 4 N., R. 19 W., about 1½ miles above the mouth of Sespe Creek and half a mile southwest of Fillmore, was established August 31, 1911.

*Daily discharge, in second-feet, of Sespe Creek near Sespe, Cal., for 1911–12—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 16 | 10 | 13 | 21 | 11.5 | [illegible] | [illegible] | 65 | [illegible] |
| 2 | 14 | 10 | 14 | 21 | 10.4 | [illegible] | [illegible] | 65 | [illegible] |
| 3 | 14 | 10 | 13 | 21 | 10.4 | [illegible] | [illegible] | 65 | [illegible] |
| 4 | 13 | 10 | 14 | 21 | 10.4 | [illegible] | [illegible] | 75 | [illegible] |
| 5 | 13 | 10 | 14 | 19 | 10.4 | 1,900 | [illegible] | 55 | [illegible] |
| 6 | 13 | 10 | 17 | 19 | 10.4 | 173 | 65 | 65 | [illegible] |
| 7 | 11 | 9.2 | 20 | 19 | 10.4 | 2,230 | 65 | [illegible] | [illegible] |
| 8 | 11 | 10 | 23 | 19 | 10.4 | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 11 | 10 | 20 | 19 | 10.4 | 390 | 77 | 72 | [illegible] |
| 10 | 11 | 10 | 20 | 19 | 10.4 | 1,130 | [illegible] | 65 | [illegible] |
| 11 | 10 | 10 | 20 | 19 | 10.4 | 200 | 1,700 | 70 | [illegible] |
| 12 | 10 | 12 | 20 | 21 | 10.4 | 770 | 490 | 70 | [illegible] |
| 13 | 10 | 12 | 19 | 19 | 10.4 | 1,620 | 305 | 50 | [illegible] |
| 14 | 17 | 14 | 19 | 19 | 10.4 | 405 | 240 | 44 | [illegible] |
| 15 | 11 | 17 | 19 | 19 | 10.4 | 280 | 300 | 44 | [illegible] |
| 16 | 13 | 16 | 20 | 17 | 10.4 | 240 | 300 | 44 | [illegible] |
| 17 | 13 | 14 | 19 | 17 | 9.2 | 200 | 220 | 44 | [illegible] |
| 18 | 10 | 14 | 17 | 16 | 9.2 | 165 | 182 | 40 | [illegible] |
| 19 | 9.2 | 16 | 17 | 14.2 | 9.2 | 140 | 165 | 40 | [illegible] |
| 20 | 7.9 | 14 | 19 | 14.2 | 9.2 | 129 | 152 | 57 | [illegible] |
| 21 | 7.0 | 14 | 19 | 14.2 | 9.2 | 118 | 140 | 57 | [illegible] |
| 22 | 7.0 | 13 | 20 | 14.2 | 9.2 | 102 | 118 | 55 | [illegible] |
| 23 | 7.0 | 13 | 20 | 14.2 | 9.2 | 96 | 108 | 31 | [illegible] |
| 24 | 7.0 | 13 | 19 | 14.2 | 9.2 | 94 | 90 | 31 | [illegible] |
| 25 | 6.4 | 11 | 19 | 16 | 9.2 | 90 | 90 | 57 | [illegible] |
| 26 | 7.0 | 13 | 19 | 16 | 7.9 | 102 | 72 | 57 | [illegible] |
| 27 | 9.2 | 13 | 20 | 16 | 7.9 | 118 | 72 | 31 | [illegible] |
| 28 | 10 | 11 | 20 | 14.2 | 7.0 | 108 | 72 | 31 | [illegible] |
| 29 | 11 | 13 | 20 | 12.4 | 7.0 | 108 | 72 | 27 | [illegible] |
| 30 | 11 | 13 | 20 | 12.4 | ........ | 98 | 72 | 25 | [illegible] |
| 31 | 10 | ........ | 19 | 11.3 | ........ | 90 | ........ | 21 | |

NOTE.—Daily discharge determined from fairly well-defined rating curve applicable as follows: Aug. [illegible] to Dec. 31, 1911, and Jan. 1 to June 30, 1912. Discharge interpolated Nov. 1–6 and 12–13, 1911.

*Monthly discharge of Sespe Creek near Sespe, Cal., for 1911–12.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| September | 12 | 7.0 | 8.84 | 526 | B. |
| October | 17 | 6.4 | 10.7 | 658 | B. |
| November | 17 | 9.2 | 12.2 | 726 | B. |
| December | 23 | 13 | 18.5 | 1,140 | B. |
| January | 21 | 11.3 | 17.0 | 1,040 | A. |
| February | 11.3 | 7.0 | 9.65 | 555 | A. |
| March | 2,230 | 7.0 | 428 | 26,300 | B. |
| April | 1,700 | 58 | 244 | 14,500 | A. |
| May | 98 | 21 | 47.1 | 2,900 | A. |
| June | 19 | 2.3 | 8.13 | 484 | A. |
| The period | | | | 48,300 | |

## SANTA PAULA CREEK NEAR SANTA PAULA, CAL.

This station, which is just below the mouth of Sisar Creek, at the east boundary of the Ojai grant in Santa Barbara National Forest, about 5½ miles northwest of Santa Paula, and 6 miles above junction with Santa Clara River, was established October 27, 1911.

The gage is a vertical staff fastened to a tree on the left bank about 600 feet below the mouth of Sisar Creek. The channel is

composed of bowlders and gravel and will shift at high stages. Discharge measurements are made from a highway bridge 1 mile below the gage or by wading near the gage. The drainage area above the station is 33.4 square miles.

The gage-height record was furnished by the United States Forest Service.

*Discharge measurements of Santa Paula Creek near Santa Paula, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Oct. 27 | F. C. Ebert | 2.40 | 4.9 | Mar. 14 | F. C. Ebert | 3.07 | 39 |
| 27 | Lesley Lee | 2.40 | 4.8 | 24 | .....do | 2.70 | 17 |
| | | | | Apr. 24 | .....do | 2.88 | 26 |
| 1912. | | | | May 14 | .....do | 2.62 | 13 |
| Jan. 6 | F. C. Ebert | 2.43 | 4.9 | June 25 | .....do | 2.39 | 6.3 |
| Feb. 2 | .....do | 2.41 | 4.7 | | | | |

*Daily gage height, in feet, of Santa Paula Creek near Santa Paula, Cal., for 1912.*

| Day. | Mar. | Apr. | May. | June. | Day. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 2.7 | 2.8 | 2.6 | 16 | | 3.0 | 2.7 | 2.5 |
| 2 | | 2.75 | 2.8 | 2.6 | 17 | | 3.2 | 2.7 | 2.5 |
| 3 | | 2.7 | 2.8 | 2.6 | 18 | | 3.5 | 2.7 | 2.5 |
| 4 | | 2.75 | 2.7 | 2.6 | 19 | | 3.0 | 2.6 | 2.5 |
| 5 | | 2.7 | 2.8 | 2.6 | 20 | | 3.0 | 2.6 | 2.5 |
| 6 | | 2.7 | 2.9 | 2.6 | 21 | | 3.0 | 2.6 | 2.5 |
| 7 | | 2.7 | 2.7 | 2.5 | 22 | | 3.9 | 2.6 | 2.5 |
| 8 | | 2.7 | 2.7 | 2.5 | 23 | | 3.0 | 2.6 | 2.5 |
| 9 | | 3.5 | 2.7 | 2.5 | 24 | 2.7 | 3.9 | 2.6 | 2.4 |
| 10 | | 4.1 | 2.7 | 2.5 | 25 | 2.8 | 2.9 | 2.65 | 2.45 |
| 11 | | 3.7 | 2.7 | 2.5 | 26 | 3.0 | 2.8 | 2.65 | 2.4 |
| 12 | | 3.0 | 2.7 | 2.5 | 27 | 2.9 | 2.9 | 2.6 | 2.4 |
| 13 | | 2.8 | 2.75 | 2.45 | 28 | 2.8 | 2.8 | 2.6 | 2.4 |
| 14 | | 2.8 | 2.7 | 2.5 | 29 | 2.8 | 2.8 | 2.6 | 2.4 |
| 15 | | 2.7 | 2.7 | 2.5 | 30 | 2.7 | 2.8 | 2.6 | 2.4 |
| | | | | | 31 | 2.0 | | 2.6 | |

NOTE.—Dec. 31, 1911, gage height was 2.45 feet.

*Daily discharge, in second-feet, of Santa Paula Creek near Santa Paula, Cal., for 1912.*

| Day. | Mar. | Apr. | May. | June. | Day. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 17 | 22 | 12 | 16 | | 34 | 17 | 8 |
| 2 | | 20 | 22 | 12 | 17 | | 50 | 17 | 8 |
| 3 | | 17 | 22 | 12 | 18 | | 80 | 17 | 8 |
| 4 | | 20 | 17 | 12 | 19 | | 34 | 12 | 8 |
| 5 | | 17 | 22 | 12 | 20 | | 34 | 12 | 8 |
| 6 | | 17 | 28 | 12 | 21 | | 34 | 12 | 8 |
| 7 | | 17 | 17 | 8 | 22 | | 130 | 12 | 8 |
| 8 | | 17 | 17 | 8 | 23 | | 34 | 12 | 8 |
| 9 | | 80 | 17 | 8 | 24 | 17 | 130 | 12 | 5 |
| 10 | | 158 | 17 | 8 | 25 | 22 | 28 | 14 | 6 |
| 11 | | 104 | 17 | 8 | 26 | 34 | 22 | 14 | 5 |
| 12 | | 34 | 17 | 8 | 27 | 28 | 28 | 12 | 5 |
| 13 | | 22 | 20 | 5 | 28 | 22 | 22 | 12 | 5 |
| 14 | | 22 | 17 | 8 | 29 | 22 | 22 | 12 | 5 |
| 15 | | 17 | 17 | 8 | 30 | 17 | 22 | 12 | 5 |
| | | | | | 31 | 17 | | 12 | |

NOTE.—Daily discharge determined from a rating curve well defined between 10 and 80 second-feet.

*Monthly discharge of Santa Paula Creek near Santa Paula, Cal., for 1912.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Run-off (total in acre-feet). | [illegible] |
|---|---|---|---|---|---|
| March 24–31 | 34 | 17 | 22.4 | 355 | [illegible] |
| April | 158 | 17 | 42.5 | 2,530 | [illegible] |
| May | 28 | 12 | 16.1 | [illegible] | [illegible] |
| June | 12 | 5 | 8.1 | [illegible] | [illegible] |

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous discharge measurements have been made in the Santa Clara River basin:

*Miscellaneous measurements in Santa Clara River drainage basin.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | Sec.-ft. |
| Aug. 9, 1898 | Santa Clara River | F. H. Olmsted | Newhall ranch | [illegible] |
| Aug. 19, 1899 | do | S. G. Bennett | do | [illegible] |
| Oct. 8, 1900 | do | W. W. Cockins, jr. | do | [illegible] |
| Apr. 30, 1903 | do | W. B. Clapp | do | [illegible] |
| June 16, 1903 | do | do | do | [illegible] |
| Sept. 16, 1903 | do | do | do | [illegible] |
| Oct. 19, 1905 | do | do | do | [illegible] |
| June 18, 1898 | do | J. B. Lippincott | 1 mile east of Camulos | [illegible] |
| Aug. 11, 1898 | do | F. H. Olmsted | do | [illegible] |
| Aug. 19, 1899 | do | S. G. Bennett | do | [illegible] |
| Apr. 30, 1903 | do | W. B. Clapp | do | [illegible] |
| June 17, 1903 | do | do | do | [illegible] |
| Sept. 16, 1903 | do | do | do | [illegible] |
| Oct. 19, 1905 | do | do | do | [illegible] |
| Mar. 15, 1899 | do | S. G. Bennett | In cienaga, 1 mile east of Fillmore. | [illegible] |
| Aug. 18, 1899 | do | do | Near Santa Paula | [illegible] |
| May 3, 1903 | do | W. B. Clapp | do | [illegible] |
| June 22, 1903 | do | do | do | [illegible] |
| July 16, 1903 | do | do | do | [illegible] |
| Aug. 13, 1903 | do | Lippincott & Power | do | [illegible] |
| Sept. 18, 1903 | do | W. B. Clapp | do | [illegible] |
| Oct. 21, 1905 | do | do | do | [illegible] |
| Aug. 14, 1903 | do | Lippincott & Power | Below head of Santa Clara Water & Irrigation Co.'s canal. | [illegible] |
| Sept. 18, 1903 | do | W. B. Clapp | do | [illegible] |
| Oct. 21, 1905 | do | do | do | [illegible] |
| Mar. 10, 1895 | Piru Creek | J. B. Lippincott | Robertson Mill | [illegible] |
| Jan. 21, 1896 | do | S. Stewart | Smith's | [illegible] |
| Jan. 31, 1898 | do | J. B. Lippincott | do | [illegible] |
| Aug. 11, 1898 | do | F. H. Olmsted | French House | [illegible] |
| Mar. 14, 1899 | do | S. G. Bennett | Narrows near Dutton's | [illegible] |
| Mar. 16, 1899 | do | do | Piru City, wagon-road crossing. | [illegible] |
| Mar. 17, 1899 | do | do | do | [illegible] |
| Aug. 19, 1899 | do | do | Head of Piru pipe line | [illegible] |
| Oct. 9, 1900 | do | W. W. Cockins, jr. | Ditches from lower creek | [illegible] |
| May 1, 1903 | do | W. B. Clapp | Dunton ranch | [illegible] |
| May 1, 1903 | do | do | Southern Pacific R. R. bridge. | [illegible] |
| June 17, 1903 | do | do | do | 2.7 |
| Sept. 17, 1903 | do | do | do | .1 |
| June 17, 1903 | do | do | 1 mile above Esperanza | [illegible] |
| Oct. 20, 1905 | do | do | do | 3.4 |
| Do. | do | do | 1 mile above Piru City | [illegible] |
| June 17, 1903 | Piru Land & Water Co.'s upper diversion. | do | Near Esperanza | [illegible] |
| Sept. 17, 1903 | do | do | do | 1.2 |
| Oct. 20, 1905 | do | do | do | 1.4 |
| June 17, 1903 | Lower diversion | do | Southern Pacific R. R. bridge. | [illegible] |
| Sept. 17, 1903 | do | do | do | 1.0 |
| Dec. 15, 1896 | German Creek | J. B. Lippincott | Below German station | .2 |
| Aug. 11, 1898 | San Francisquito Creek | F. H. Olmsted | Junction with Santa Clara River. | [illegible] |

*Miscellaneous measurements in Santa Clara River drainage basin*—Continued.

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Apr. 30, 1903 | San Francisquito Creek. | W. B. Clapp | Road crossing, Newhall ranch. | 2.0 |
| June 16, 1903 | ....do | ....do | ....do | 2.4 |
| Sept. 16, 1903 | ....do | ....do | ....do | 2.0 |
| Oct. 19, 1905 | ....do | ....do | ....do | 1.3 |
| Aug. 11, 1898 | Sespe Creek | F. H. Olmsted | | 2.5 |
| Mar. 15, 1899 | ....do | S. G. Bennett | Head of water company's canal. | 8.3 |
| Aug. 18, 1899 | ....do | ....do | ....do | 1.9 |
| May 2, 1903 | ....do | W. B. Clapp | Southern Pacific R. R. bridge. | 89.0 |
| Sept. 17, 1903 | ....do | ....do | Below canal heading | .1 |
| Oct. 20, 1905 | ....do | ....do | ....do | 4.8 |
| Aug. 18, 1889 | Santa Paula Creek | S. G. Bennett | Above Neeper schoolhouse | .85 |
| May 3, 1903 | ....do | W. B. Clapp | 5 miles above Santa Paula | 28.0 |
| Do | ....do | ....do | Santa Paula | 19.0 |
| Oct. 21, 1905 | ....do | ....do | 3 miles above Santa Paula. | 4.9 |
| May 3, 1903 | Santa Paula Water Co.'s ditch. | ....do | Heading | 5.6 |
| June 22, 1903 | ....do | ....do | ....do | 10.1 |
| Sept. 18, 1903 | ....do | ....do | ....do | 2.7 |
| Sept. 17, 1903 | Sespe Land & Water Co.'s canal. | ....do | ½ mile below heading | 4.6 |
| Oct. 20, 1905 | ....do | ....do | ....do | 6.6 |
| Aug. 19, 1899 | Camulor ditch | S. G. Bennett | | 17.6 |
| Oct. 8, 1900 | ....do | W. W. Cockins, jr | Head of wooden flume | 11.4 |
| June 17, 1903 | ....do | W. B. Clapp | Head | 7.6 |
| Sept. 16, 1903 | ....do | ....do | ....do | 11.6 |
| Oct. 19, 1905 | ....do | ....do | 1,000 feet below head | 7.6 |
| June 16, 1903 | Newhall ditch | ....do | Southern Pacific R. R. bridge. | 1.7 |
| Sept. 16, 1903 | ....do | ....do | ....do | 1.8 |
| Aug. 18, 1899 | Farmers' ditch | S. G. Bennett | | 16.0 |
| June 22, 1903 | ....do | W. B. Clapp | 1 mile above Santa Paula | 7.8 |
| July 16, 1903 | ....do | ....do | ....do | 8.4 |
| Aug. 13, 1903 | ....do | ....do | ....do | 8.6 |
| Sept. 18, 1903 | ....do | ....do | ....do | 8.6 |
| Oct. 21, 1905 | ....do | ....do | ....do | 7.2 |
| Aug. 18, 1899 | Grees ditch | S. G. Bennett | | 8.6 |
| June 22, 1903 | ....do | W. B. Clapp | 1 mile above Santa Paula | 11.0 |
| July 16, 1903 | ....do | ....do | ....do | 5.8 |
| Aug. 13, 1903 | ....do | ....do | ....do | 11.1 |
| Sept. 18, 1903 | ....do | ....do | ....do | 7.4 |
| Oct. 21, 1905 | ....do | ....do | ....do | 9.2 |
| Aug. 18, 1899 | Richardson ditch | S. G. Bennett | | 5.8 |
| June 22, 1903 | ....do | W. B. Clapp | 1 mile above Santa Paula | 4.2 |
| July 16, 1903 | ....do | ....do | ....do | 2.3 |
| Aug. 13, 1903 | ....do | ....do | ....do | 1.2 |
| Sept. 18, 1903 | ....do | ....do | ....do | 1.2 |
| July 15, 1903 | Santa Clara Water & Irrigation Co.'s canal. | Clapp and Power | Head | 30.0 |
| July 16, 1903 | ....do | ....do | ....do | 33.0 |
| Aug. 14, 1903 | ....do | Lippincott and Power | ....do | 31.6 |
| Sept. 18, 1903 | ....do | W. B. Clapp | ....do | 26.7 |
| 1905 | ....do | | ....do | 16.7 |
| Sept. 3, 1911 | Piru Creek | | 900 feet above Southern Pacific R. R. bridge at Piru. | 16.0 |
| Oct. 27, 1911 | Sisar Creek | | 100 feet above mouth | 1.0 |
| Jan. 6, 1912 | ....do | | Near mouth, SW. ¼ NW. ¼ sec. 16, T. 4 N., R. 21 W. | 1.2 |
| Feb. 2, 1912 | ....do | | ....do | 1.0 |
| Mar. 24, 1912 | ....do | | ....do | 5.1 |
| May 14, 1912 | ....do | | ....do | 2.9 |

## VENTURA RIVER BASIN.

### VENTURA RIVER NEAR NORDHOFF, CAL.

This station, which is located just below the junction of Matilija Creek and North Fork of Matilija Creek, in the N. ½ SW. ¼ sec. 28, T. 5 N., R. 23 W., about 4 miles northwest of Nordhoff, was established October 23, 1911.

[illegible]

[illegible] 331—2.

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible] 331—2.

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily discharge, in second-feet, of Ventura River near Nordhoff, Cal., for 1911–12.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 13 | 12 | 14 | 12 | 12 | 30 | 29 | 15 |
| 2 | | 12 | 12 | 14 | 12 | 12 | 30 | 28 | 16 |
| 3 | | 12 | 12 | 14 | 12 | 12 | 30 | 27 | 16 |
| 4 | | 12 | 13 | 14 | 12 | 27 | 29 | 27 | 16 |
| 5 | | 12 | 13 | 14 | 12 | 395 | 28 | 26 | 15 |
| 6 | | 12 | 27 | 14 | 12 | 204 | 28 | 26 | 14 |
| 7 | | 12 | 17 | 14 | 12 | 56 | 28 | 28 | 14 |
| 9 | | 12 | 15 | 14 | 12 | 43 | 27 | 28 | 14 |
| 9 | | 12 | 15 | 14 | 12 | 43 | 37 | 27 | 14 |
| 0 | | 12 | 15 | 14 | 12 | 112 | 161 | 26 | 14 |
| 1 | | 13 | 15 | 14 | 12 | 112 | 100 | 24 | 14 |
| 2 | | 13 | 15 | 13 | 12 | 142 | 71 | 23 | 14 |
| 3 | | 13 | 15 | 12 | 12 | 269 | 63 | 22 | 14 |
| 4 | | 13 | 15 | 12 | 12 | 71 | 56 | 21 | 14 |
| 5 | | 13 | 15 | 12 | 11 | 63 | 56 | 20 | 14 |
| 6 | | 12 | 14 | 12 | 11 | 56 | 56 | 20 | 13 |
| 7 | | 12 | 14 | 12 | 11 | 49 | 52 | 19 | 12 |
| 8 | | 12 | 14 | 12 | 11 | 43 | 49 | 18 | 12 |
| 9 | | 12 | 14 | 12 | 10 | 40 | 46 | 18 | 12 |
| 0 | | 12 | 14 | 12 | 10 | 46 | 43 | 18 | 12 |
| 1 | | 12 | 14 | 12 | 10 | 46 | 43 | 18 | 12 |
| 2 | | 12 | 14 | 12 | 11 | 37 | 40 | 18 | 12 |
| 3 | 11 | 13 | 14 | 12 | 11 | 34 | 40 | 18 | 12 |
| 4 | 12 | 12 | 14 | 12 | 11 | 32 | 37 | 18 | 12 |
| 5 | 12 | 12 | 14 | 12 | 11 | 32 | 37 | 28 | 12 |
| 6 | 12 | 12 | 14 | 12 | 11 | 34 | 34 | 20 | 12 |
| 7 | 13 | 12 | 14 | 13 | 12 | 43 | 32 | 20 | 11 |
| 8 | 14 | 12 | 16 | 13 | 12 | 43 | 31 | 18 | 11 |
| 9 | 13 | 12 | 16 | 13 | 12 | 37 | 30 | 17 | 11 |
| 0 | 13 | 12 | 15 | 13 | | 34 | 30 | 16 | 10 |
| 1 | 13 | | 15 | 12 | | 32 | | 16 | |

NOTE.—Daily discharge determined from fairly well defined rating curves applicable as follows: Oct. 23 o Dec. 3, 1911, and Jan. 1 to June 30, 1912.

*Monthly discharge of Ventura River near Nordhoff, Cal., for 1911–12.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| October 23–31 | 14 | 11 | 12.6 | 225 | B. |
| Vovember | 13 | 12 | 12.2 | 726 | B. |
| December | 27 | 12 | 14.7 | 904 | B. |
| anuary | 14 | 12 | 12.9 | 793 | B. |
| February | 12 | 10 | 11.5 | 662 | B. |
| March | 395 | 12 | 71.3 | 4,380 | C. |
| April | 161 | 27 | 45.8 | 2,730 | B. |
| May | 29 | 16 | 22.0 | 1,350 | B. |
| une | 16 | 10 | 13.1 | 780 | B. |
| The period | | | | 12,600 | |

## VENTURA RIVER NEAR VENTURA, CAL.

This station, which is located at the highway bridge in Foster Memorial Park, near the southeast corner of the Santa Ana grant, onefourth of a mile below the mouth of Coyote Creek and about 5 miles north of Ventura and the mouth of the river, was established September 4, 1911.

The gage is a chain gage at the bridge. The length of the chain is 28.14 feet. The channel is composed of gravel and bowlders and

[illegible] during high water. Discharge measurements are made from the bridge or by wading.

Water is diverted from the main river and tributaries above the station for irrigation. The results are considered fairly good.

Discharge measurements of [illegible] River near [illegible], Cal., in 1911-12.

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | Feet. | Sec.-ft. | 1912. | | Feet. | Sec.-ft. |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| | | | | [illegible] | do | [illegible] | [illegible] |
| 1912. | | | | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |

[illegible]

Daily gage height, in feet, of [illegible] River near [illegible], Cal., for 1911-12.

| Day. | Aug. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | | [illegible] | | [illegible] | [illegible] | | [illegible] | | [illegible] | |

NOTE.—Water was diverted above the station during portions of May and June, 1912.

*Daily discharge, in second-feet, of Ventura River near Ventura, Cal., for 1911–12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | ........ | 21 | 21 | 21 | 22 | 19 | 12 | 43 | 41 | 18 |
| 2 | ........ | 23 | 21 | 21 | 22 | 18 | 12 | 43 | 38 | 17 |
| 3 | ........ | 21 | 21 | 21 | 22 | 16 | 12 | 43 | 33 | 17 |
| 4 | 23 | 21 | 21 | 21 | 24 | 16 | 14 | 43 | 33 | 17 |
| 5 | 23 | 21 | 21 | 21 | 24 | 16 | 335 | 38 | 33 | 17 |
| 6 | 23 | 23 | 21 | 27 | 24 | 16 | 375 | 38 | 33 | 17 |
| 7 | 23 | 21 | 21 | 27 | 24 | 16 | 105 | 38 | 33 | 16 |
| 8 | 23 | 20 | 21 | 27 | 22 | 16 | 70 | 38 | 33 | 16 |
| 9 | 23 | 21 | 21 | 27 | 22 | 16 | 70 | 55 | 33 | 16 |
| 10 | [a] 23 | 20 | 21 | 25 | 22 | 16 | 205 | 70 | 31 | 16 |
| 11 | 23 | 20 | 21 | 25 | 22 | 16 | 87 | 300 | 29 | 17 |
| 12 | 23 | 21 | 21 | 25 | 22 | 16 | 890 | 162 | 29 | 17 |
| 13 | 23 | 21 | 21 | 25 | 22 | 16 | 199 | 125 | 25 | 17 |
| 14 | 23 | 21 | 21 | 25 | 22 | 16 | 125 | 105 | 25 | 16 |
| 15 | 21 | 21 | 21 | 27 | 22 | 14 | 105 | 96 | 24 | 16 |
| 16 | 20 | 21 | 21 | 27 | 22 | 14 | 87 | 96 | 24 | 16 |
| 17 | 21 | 18 | 21 | 27 | 22 | 15 | 70 | 78 | 22 | 12 |
| 18 | 18 | 21 | 21 | 25 | 22 | 15 | 70 | 70 | 20 | 11 |
| 19 | 14 | 18 | 21 | 25 | 22 | 15 | 58 | 67 | 20 | 11 |
| 20 | 20 | 20 | 21 | 25 | 22 | 14 | 58 | 62 | 20 | 12 |
| 21 | 18 | 21 | 21 | 25 | 22 | 14 | 58 | 58 | 20 | 12 |
| 22 | 20 | 21 | 21 | 25 | 22 | 14 | 49 | 55 | 18 | 12 |
| 23 | 21 | 21 | 21 | 25 | 22 | 14 | 49 | 55 | 17 | 12 |
| 24 | 20 | 21 | 21 | 25 | 22 | 14 | 49 | 53 | 17 | 13 |
| 25 | 20 | 21 | 21 | 25 | 22 | 14 | 49 | 49 | 22 | 12 |
| 26 | 20 | 21 | 21 | 25 | 22 | 14 | 49 | 49 | 25 | 12 |
| 27 | 18 | 21 | 21 | 25 | 22 | 14 | 70 | 49 | 22 | 12 |
| 28 | 21 | 21 | 21 | 25 | 22 | 12 | 55 | 43 | 21 | 12 |
| 29 | 21 | 21 | 21 | 25 | 22 | 12 | 49 | 43 | 19 | 12 |
| 30 | 21 | 21 | 21 | 25 | 22 | ........ | 43 | 43 | 18 | 12 |
| 31 | ........ | 21 | ........ | 25 | 22 | ........ | 43 | ........ | 18 | ........ |

[a] Interpolated.

NOTE.—Daily discharge determined from fairly well defined rating curves applicable as follows: Sept. 4 to Dec. 31, 1911, and Jan. 1 to June 30, 1912.

*Monthly discharge of Ventura River near Ventura, Cal., for 1911–12.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1911. | | | | | |
| September 4-30 | 23 | 14 | 21.0 | 1,120 | B. |
| 1911-12. | | | | | |
| October | 23 | 18 | 20.8 | 1,280 | B. |
| November | 21 | 21 | 21.0 | 1,250 | B. |
| December | 27 | 21 | 24.8 | 1,520 | B. |
| January | 24 | 22 | 22.3 | 1,370 | A. |
| February | 19 | 12 | 15.1 | 869 | A. |
| March | 890 | 12 | 114 | 7,010 | B. |
| April | 300 | 38 | 70.2 | 4,180 | A. |
| May | 41 | 17 | 25.7 | 1,580 | A. |
| June | 18 | 11 | 14.4 | 857 | A. |
| The period | ........ | ........ | ........ | 19,400 | |

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the Ventura River basin:

*Miscellaneous measurements in Ventura River drainage basin.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| 1902. | | | | *Sec.-ft.* |
| Sept. 25 | Ventura River | J. B. Lippincott | Below diversion of Ventura city water system, Coyote Creek. | [illegible] |
| 25 | Ventura River, North Fork. | do | In flume | [illegible] |
| 25 | Matilija Creek | do | Above mouth of North Fork | [illegible] |
| 25 | Power ditch | do | Near head | [illegible] |
| 1903. | | | | |
| Sept. 19 | Ventura River | W. B. Clapp | Below upper diversion | [illegible] |
| 19 | Ventura Light & Power Co.'s canal. | do | Upper diversion city supply | [illegible] |
| 19 | Power ditch | do | Old mill | [illegible] |
| 1906. | | | | |
| Oct. 24 | Matilija Creek | | Above junction of North Fork | [illegible] |
| 24 | Matilija Creek, North Fork. | | 500 feet above junction with Matilija Creek. | [illegible] |
| 24 | San Antonio Creek | | 1½ miles below Nordhoff | 4.4 |
| 1911. | | | | |
| Oct. 23 | Matilija Creek | | 300 feet above junction with North Fork. | [illegible] |
| 23 | Matilija Creek, North Fork. | | 100 feet above mouth | 20 |
| 23 | Flume | | Intake, diverts from North Fork | [illegible] |
| 1912. | | | | |
| Jan. 6 | Matilija Creek | | 200 feet above junction with North Fork. | 19 |
| 6 | Matilija Creek, North Fork. | | Near mouth | 3.4 |
| Feb. 2 | do | | do | 2.1 |
| 27 | do | | do | [illegible] |
| Mar. 23 | do | | do | [illegible] |
| Apr. 23 | do | | do | [illegible] |
| May 14 | do | | do | [illegible] |
| June 25 | do | | Above diversion | [illegible] |
| Mar. 23 | Coyote Creek | | Near mouth | [illegible] |
| Apr. 23 | do | | do | [illegible] |
| May 15 | do | | do | [illegible] |

## SAN ROQUI CREEK.

San Roqui Creek was measured during the year 1890 by Charles J. Johansen for the Pacific Improvement Co. The point of measurement was a short distance below the San Roqui tunnel, which was being built from 1899 to 1901, the point of measurement being near an old dam in the stream. This drainage line is called San Roqui Creek in its mountainous portions, but lower down and south of the Southern Pacific Railroad it is called the Arroyo Burro.

*Discharge measurements of San Roqui Creek, Santa Barbara County.*

[By Charles J. Johansen.]

**At old diversion box below tunnel.**

| Date. | Discharge. | Date. | Discharge. | Date. | Discharge. |
|---|---|---|---|---|---|
| 1890. | *Sec.-feet.* | 1890. | *Sec.-feet.* | 1890. | *Sec.-feet.* |
| Feb. 13 | 4.96 | May 1 | 1.55 | July 9 | 0.29 |
| 19 | 5.70 | 3 | 1.39 | 11 | .26 |
| 21 | 9.61 | 5 | 1.39 | 13 | .26 |
| 26 | 11.03 | 7 | 1.39 | 15 | .26 |
| Mar. 1 | 6.91 | 9 | 1.23 | 17 | .26 |
| 3 | 6.28 | 11 | 1.23 | 19 | .23 |
| 5 | 5.67 | 13 | 1.30 | 21 | .20 |
| 6 | 5.67 | 15 | 1.23 | 23 | .20 |
| 8 | 5.20 | 17 | 1.23 | 25 | .20 |
| 10 | 5.20 | 19 | 1.23 | 27 | .20 |
| 12 | 4.96 | 20 | .63 | 29 | .20 |
| 14 | 4.96 | 22 | .65 | 31 | .24 |
| 16 | 4.27 | 24 | .65 | Aug. 2 | .24 |
| 18 | 4.27 | 26 | .65 | 4 | .24 |
| 20 | 4.73 | 28 | .54 | 6 | .24 |
| 22 | 4.73 | 30 | .54 | 8 | .26 |
| 24 | 4.27 | June 2 | .52 | 10 | .26 |
| 26 | 3.84 | 4 | .52 | 12 | .26 |
| 28 | 3.84 | 5 | .44 | 14 | .23 |
| 30 | 3.84 | 7 | .40 | 16 | .23 |
| Apr. 1 | 3.42 | 9 | .35 | 18 | .20 |
| 3 | 3.42 | 11 | .35 | 19 | .20 |
| 5 | 3.42 | 13 | .35 | 22 | .17 |
| 7 | 3.21 | 15 | .35 | Sept. 2 | .19 |
| 9 | 3.21 | 17 | .38 | 3 | .19 |
| 11 | 3.00 | 19 | .38 | 4 | .19 |
| 13 | 2.80 | 21 | .38 | 5 | .19 |
| 15 | 2.62 | 23 | .38 | 6 | .19 |
| 17 | 2.62 | 25 | .35 | 7 | .19 |
| 19 | 2.42 | 27 | .35 | 8 | .19 |
| 21 | 2.15 | 29 | .29 | 10 | .19 |
| 23 | 1.88 | July 1 | .29 | 11 | .19 |
| 25 | 1.80 | 3 | .29 | 12 | .19 |
| 27 | 1.80 | 5 | .29 | 13 | .19 |
| 29 | 1.55 | 7 | .29 | 14 | .19 |

**Below old diversion box.**

| | | | | | |
|---|---|---|---|---|---|
| Aug. 26 | 0.09 | Sept. 4 | 0.04 | Sept. 12 | 0.04 |
| 28 | .09 | 6 | .05 | 14 | .04 |
| 30 | .07 | 8 | .04 | | |
| Sept. 2 | .04 | 10 | .04 | | |

## SAN JOSE CREEK.

The following measurements of San Jose Creek were made by Charles J. Johansen for the Pacific Improvement Co. The pipe line along the West Fork of San Jose Creek was not carrying water in the year 1890.

The point of measurement of the West Fork was a short distance above its junction with the East Fork, or main stream. The main stream, or East Fork, of San Jose Creek was gaged a short distance above its junction with the West Fork.

*Discharge measurements of San Jose Creek, Santa Barbara County, Cal.*

[By Charles J. Johnson.]

**West Fork at mouth.**

| Date. | Discharge. | Date. | Discharge. | Date. | Discharge. |
|---|---|---|---|---|---|
| 1890. | *Sec.-feet.* | 1890. | *Sec.-feet.* | 1890. | *Sec.-feet.* |
| Feb. 4 | 1.57 | Apr. 21 | 0.32 | June 16 | 0.27 |
| 15 | .54 | 23 | .32 | 18 | .21 |
| 28 | .94 | 25 | .32 | 20 | .19 |
| Mar. 1 | .60 | 27 | .32 | 22 | .21 |
| 3 | .60 | 29 | .35 | 24 | .17 |
| 5 | .54 | May 1 | .32 | 26 | .19 |
| 7 | .54 | 3 | .26 | 28 | .20 |
| 9 | .56 | 5 | .32 | 30 | .20 |
| 11 | .50 | 7 | .32 | July 2 | .17 |
| 13 | .44 | 9 | .26 | 4 | .17 |
| 15 | .44 | 11 | .26 | 6 | .19 |
| 17 | .44 | 12 | .23 | 8 | .17 |
| 19 | .50 | 13 | .26 | 10 | .17 |
| 21 | .44 | 15 | .28 | 12 | .17 |
| 23 | .40 | 17 | .20 | 14 | .16 |
| 25 | .40 | 19 | .26 | 16 | .16 |
| 27 | .40 | 21 | .23 | 18 | .14 |
| 29 | .40 | 23 | .23 | 20 | .16 |
| 31 | .40 | 25 | .23 | 22 | .14 |
| Apr. 2 | .40 | 27 | .23 | 24 | .17 |
| 4 | .40 | 29 | .23 | 26 | .16 |
| 6 | .40 | 31 | .21 | 28 | .17 |
| 8 | .40 | June 2 | .21 | 30 | .17 |
| 10 | .35 | 4 | .21 | Aug. 1 | .17 |
| 12 | .40 | 6 | .21 | 2 | .17 |
| 14 | .40 | 8 | .18 | 3 | .17 |
| 15 | .32 | 10 | .23 | 4 | .17 |
| 17 | .29 | 12 | .21 | 6 | .17 |
| 19 | .32 | 14 | .21 | 8 | .17 |

**East Fork above West Fork.**

| | | | | | |
|---|---|---|---|---|---|
| 1890. | *Sec.-feet.* | 1890. | *Sec.-feet.* | 1890. | *Sec.-feet.* |
| Mar. 1 | 6.38 | May 13 | 1.50 | July 28 | 0.54 |
| 3 | 5.76 | 15 | 1.47 | 30 | .60 |
| 5 | 5.17 | 17 | 1.47 | Aug. 1 | .63 |
| 7 | 4.88 | 19 | 1.47 | 2 | .63 |
| 9 | 4.59 | 21 | 1.19 | 3 | .63 |
| 11 | 4.03 | 23 | 1.19 | 4 | .63 |
| 13 | 3.76 | 25 | 1.25 | 6 | .63 |
| 15 | 3.51 | 27 | 1.19 | 8 | .63 |
| 17 | 3.00 | 29 | 1.19 | 11 | .58 |
| 19 | 3.51 | 31 | 1.19 | 13 | .58 |
| 21 | 5.11 | June 2 | 1.12 | 15 | .62 |
| 23 | 4.59 | 4 | .94 | 17 | .65 |
| 25 | 4.59 | 6 | .88 | 19 | .60 |
| 27 | 4.31 | 8 | .91 | 21 | .60 |
| 29 | 4.31 | 10 | .91 | 23 | .60 |
| 31 | 4.03 | 12 | .94 | 25 | .65 |
| Apr. 2 | 4.03 | 14 | 1.00 | 27 | .65 |
| 4 | 3.51 | 16 | 1.12 | 29 | .60 |
| 6 | 3.51 | 18 | 1.06 | 31 | .60 |
| 8 | 3.51 | 20 | 1.00 | Sept. 2 | .57 |
| 10 | 3.25 | 22 | .82 | 4 | .40 |
| 12 | 3.00 | 24 | .82 | 6 | .44 |
| 14 | 3.00 | 26 | .88 | 8 | .57 |
| 15 | 1.97 | 28 | .94 | 10 | .44 |
| 17 | 2.24 | 30 | .82 | 12 | .54 |
| 19 | 2.10 | July 2 | .76 | 14 | .50 |
| 21 | 2.10 | 4 | .76 | 15 | .60 |
| 23 | 1.97 | 6 | .79 | 18 | .60 |
| 25 | 1.97 | 8 | .76 | 20 | .65 |
| 27 | 1.97 | 10 | .71 | 22 | .60 |
| 29 | 2.10 | 12 | .73 | 24 | .71 |
| May 1 | 1.97 | 14 | .70 | 26 | .71 |
| 3 | 1.72 | 16 | .70 | 28 | .62 |
| 5 | 1.72 | 18 | .65 | 30 | .71 |
| 7 | 1.72 | 20 | .62 | Oct. 2 | .71 |
| 9 | 1.72 | 22 | .60 | 4 | .68 |
| 11 | 1.72 | 24 | .60 | 6 | .60 |
| 12 | 1.18 | 26 | .63 | 7 | .61 |

## LOMA ABAJO RIVER.

The Loma Abajo was measured by Charles J. Johansen for the Pacific Improvement Co., as indicated below. The point of measurement was a short distance above the junction with Gato Creek. At the time of these measurements no water was flowing in the pipe line from the Loma Abajo to the Ontare ranch.

*Discharge measurements of Loma Abajo River in Santa Barbara County, Cal., in 1890.*

**Above junction with Gato Creek.**

[By Charles J. Johansen.]

| Date. | Discharge. | Date. | Discharge. | Date. | Discharge. |
|---|---|---|---|---|---|
| | *Sec.-feet.* | | *Sec.-feet.* | | *Sec.-feet.* |
| Feb. 7 | 3.84 | May 14 | 0.46 | July 27 | 0.21 |
| 14 | 3.00 | 16 | .60 | 29 | .21 |
| 27 | 5.67 | 18 | .53 | 31 | .23 |
| Mar. 2 | 3.21 | 20 | .53 | Aug. 2 | .24 |
| 4 | 3.00 | 20 | .74 | 4 | .26 |
| 6 | 2.80 | 22 | .59 | 6 | .20 |
| 9 | 2.80 | 24 | .59 | 8 | .18 |
| 11 | 2.24 | 26 | .61 | 10 | .24 |
| 13 | 2.06 | 28 | .61 | 12 | .27 |
| 15 | 2.06 | 30 | .59 | 14 | .30 |
| 17 | 1.88 | June 1 | .58 | 17 | .12 |
| 21 | 1.88 | 3 | .49 | 19 | .13 |
| 23 | 1.88 | 5 | .49 | 21 | .17 |
| 25 | 1.55 | 7 | .44 | 23 | .11 |
| 27 | 1.55 | 9 | .47 | 25 | .12 |
| 29 | 1.55 | 11 | .47 | 27 | .12 |
| 31 | 1.39 | 13 | .42 | 29 | .11 |
| Apr. 2 | 1.39 | 15 | .50 | 31 | .09 |
| 4 | 1.39 | 17 | .56 | Sept. 2 | .07 |
| 6 | 1.23 | 19 | .52 | 4 | .08 |
| 8 | 1.23 | 21 | .49 | 6 | .12 |
| 10 | 1.08 | 23 | .42 | 8 | .06 |
| 12 | 1.23 | 25 | .45 | 10 | .09 |
| 14 | 1.08 | 27 | .42 | 12 | .07 |
| 17 | .92 | 29 | .37 | 14 | .09 |
| 18 | .76 | July 1 | .34 | 16 | .09 |
| 20 | .76 | 3 | .42 | 18 | .11 |
| 22 | .76 | 5 | .26 | 20 | .08 |
| 24 | .76 | 7 | .24 | 22 | .09 |
| 26 | .76 | 9 | .23 | 24 | .12 |
| 28 | .76 | 11 | .24 | 26 | .13 |
| 30 | .76 | 13 | .24 | 28 | .14 |
| May 2 | .76 | 15 | .24 | 30 | .30 |
| 4 | .68 | 17 | .20 | Oct. 2 | .20 |
| 6 | .68 | 19 | .23 | 4 | .14 |
| 8 | .60 | 21 | .17 | 6 | .14 |
| 10 | .60 | 23 | .20 | | |
| 12 | .60 | 25 | .18 | | |

| Date. | Locality. | Discharge. | Date. | Locality. | Discharge. |
|---|---|---|---|---|---|
| | | *Sec.-feet.* | | | *Sec.-feet.* |
| Aug. 18, a.m. | Below Upper Forks. | 0.07 | May 21 | Upper Forks—West Fork. | 0.07 |
| 18, p.m. | Do. | .04 | June 4 | Upper Forks—East Fork. | .31 |
| 21, a.m. | Do. | .11 | 4 | Upper Forks—West Fork. | .06 |
| 21, p.m. | Do. | .04 | | | |
| May 21 | Upper Forks—East Fork. | .46 | | | |

*Discharge measurements of Santa Ynez River near Santa Barbara, Cal., in 1903-1904, 1906, and 1911-12*—Continued.

| Date. | Gage height. | Discharge. |
|---|---|---|
| 1904. | *Feet.* | *Sec.-ft.* |
| Mar. 5 | | 2.95 |
| 6 | | 2.88 |
| 7 | | 2.43 |
| 8 | | 2.33 |
| 9 | | 2.60 |
| 10 | | 2.35 |
| 11 | 3.08 | 135.00 |
| 12 | 2.44 | 27.00 |
| 13 | 2.36 | 16.40 |
| 14 | 2.32 | 11.90 |
| 15 | 2.28 | 10.20 |
| 19 | 2.20 | 7.24 |
| 20 | 2.20 | 6.96 |
| 21 | 2.18 | 6.41 |
| 23 | 3.88 | 442.00 |
| 24 | 2.82 | 70.00 |
| 25 | 2.68 | 49.00 |
| 26 | 2.52 | 30.00 |
| 27 | 2.46 | 26.00 |
| 28 | 2.43 | 24.00 |
| 29 | 2.47 | 26.00 |
| 30 | 2.45 | 25.00 |
| 31 | 2.42 | 23.00 |
| Apr. 1 | 2.37 | 16.30 |
| 2 | 2.35 | 14.50 |
| 3 | 2.33 | 14.20 |
| 4 | 2.31 | 11.20 |
| 5 | 2.32 | 12.40 |
| 6 | 2.27 | 10.10 |
| 7 | 2.26 | 9.64 |
| 8 | 2.25 | 8.87 |
| 12 | 2.20 | 6.80 |
| 13 | 2.20 | 6.87 |
| 14 | 2.19 | 5.32 |
| 15 | 2.19 | 5.24 |
| 16 | 2.21 | 5.93 |
| 17 | 2.20 | 5.61 |
| 18 | 2.20 | 5.64 |
| 19 | 3.03 | 101.00 |
| 20 | 2.83 | 74.00 |
| 21 | 2.52 | 30.00 |
| 22 | 2.47 | 25.00 |
| 24 | 2.39 | 17.10 |
| 25 | 2.37 | 16.60 |
| 27 | 2.47 | 24.00 |
| 28 | 2.46 | 23.00 |
| 29 | 2.43 | 21.00 |
| 30 | 2.43 | 20.00 |
| May 2 | 2.38 | 17.20 |
| 5 | 2.32 | 11.40 |
| 6 | 2.29 | 10.50 |
| 7 | 2.28 | 10.20 |
| 8 | 2.23 | 7.90 |
| 9 | 2.23 | 8.05 |
| 10 | 2.22 | 7.69 |
| 14 | 2.19 | 5.89 |
| 15 | 2.19 | 6.40 |
| 16 | 2.15 | 4.28 |
| 17 | 2.13 | 4.05 |
| 1904. | *Feet.* | *Sec.-ft.* |
| May 18 | 2.16 | 4.43 |
| 19 | 2.12 | 3.60 |
| 21 | 2.12 | 3.29 |
| 22 | 2.12 | 3.34 |
| 23 | 2.11 | 3.13 |
| 24 | 2.11 | 3.19 |
| 25 | 2.16 | 4.43 |
| 26 | 2.14 | 4.41 |
| 27 | 2.12 | 3.32 |
| 30 | 2.09 | 2.99 |
| 31 | 2.09 | 3.12 |
| June 1 | 2.09 | 2.94 |
| 2 | 2.07 | 2.60 |
| 3 | 2.06 | 2.50 |
| 4 | 2.05 | 2.28 |
| 5 | 2.05 | 2.28 |
| 6 | 2.03 | 2.06 |
| 10 | 2.01 | .94 |
| 1906. | | |
| Jan. 12 | 2.10 | 4.7 |
| 26 | 2.18 | 10.1 |
| Feb. 7 | 2.21 | 10.1 |
| 10 | 2.40 | 37 |
| 11 | 2.61 | 63 |
| 15 | 2.94 | 144 |
| 16 | 2.53 | 59 |
| 24 | 2.30 | 24 |
| Mar. 14 | 3.37 | 291 |
| 15 | 3.10 | 189 |
| 16 [a] | 5.30 | 2,440 |
| 16 [a] | 6.70 | 4,170 |
| 16 [a] | 7.65 | 5,440 |
| 16 [a] | 8.65 | 6,700 |
| 17 [a] | 4.30 | 970 |
| 17 [a] | 4.10 | 780 |
| 17 [a] | 4.30 | 968 |
| 17 [a] | 4.10 | 777 |
| 18 [a] | 3.74 | 544 |
| 18 [a] | 3.74 | 534 |
| Apr. 17 | 2.80 | 131 |
| June 1 | 2.50 | 65 |
| 29 | 2.21 | 22 |
| July 9 | 2.10 | 8.5 |
| 27 | 1.95 | 2.0 |
| Aug. 17 | 1.82 | 1.0 |
| Sept. 24 | 1.82 | 0.7 |
| Dec. 27 | 3.90 | 468 |
| 1911. | | |
| Mar. 27 | 6.50 | 514 |
| 31 | 6.20 | 361 |
| Apr. 13 | 6.72 | 229 |
| 24 | 5.48 | 155 |
| 29 | 5.40 | 148 |
| May 5 | 5.29 | 108 |
| 10 | 5.20 | 105 |
| 20 | 5.10 | 85 |
| 30 | 5.00 | 62 |
| 1911. | *Feet.* | *Sec.-ft.* |
| June 5 | 4.96 | 55 |
| 11 | 4.91 | 49 |
| 20 | 4.80 | 27 |
| July 2 | 4.75 | 27 |
| 6 | 4.75 | 22 |
| 13 | 4.70 | 19 |
| 20 | 4.66 | 15 |
| 24 | 4.65 | 13 |
| 28 | 4.60 | 10 |
| Aug. 3 | 4.56 | 8.3 |
| 11 | 4.60 | 8.5 |
| 21 | 4.55 | 5.0 |
| 29 | 4.52 | 5.0 |
| 31 | 4.50 | 4.9 |
| Sept. 6 [b] | 4.50 | 4.9 |
| 6 | 4.50 | 4.7 |
| 20 | 4.50 | 4.7 |
| Oct. 2 | 4.52 | 4.9 |
| 14 | 4.53 | 5.4 |
| 21 | 4.52 | 6.0 |
| 31 | 4.66 | 8.3 |
| Nov. 11 | 4.68 | 8.9 |
| 20 | 4.80 | 10 |
| Dec. 1 | 4.80 | 10 |
| 11 | 4.85 | 13 |
| 21 | 4.83 | 13 |
| 1912. | | |
| Jan. 2 | 4.83 | 13 |
| 11 | 4.86 | 14 |
| 22 | 4.85 | 11 |
| 31 | 4.85 | 11 |
| Feb. 19 | 4.81 | 10 |
| 22 [b] | 4.80 | 9.6 |
| 22 | 4.80 | 9.3 |
| 23 | 4.80 | 9.4 |
| 23 [b] | 4.80 | 9.2 |
| Mar. 3 | 5.04 | 51 |
| 4 | 5.00 | 28 |
| 5 | 6.55 | 492 |
| 5 | 5.33 | 105 |
| 6 | 6.50 | 489 |
| 6 | 6.02 | 304 |
| 12 | 7.10 | 765 |
| 12 | 7.50 | 903 |
| 24 | 5.08 | 53 |
| Apr. 12 | 5.57 | 167 |
| 20 | 5.17 | 83 |
| May 1 | 5.03 | 38 |
| 13 | 4.95 | 29 |
| 24 | 4.88 | 28 |
| 25 | 5.15 | 92 |
| June 4 | 4.82 | 14 |
| 5 | 4.80 | 12 |
| 5 [c] | 4.80 | 10 |
| 6 [c] | 4.80 | 10 |
| 6 | 4.80 | 12 |
| 14 | 4.78 | 9.8 |
| 24 | 4.75 | 8.0 |

[a] Measured by floats. [b] Measured over weir. [c] Made by F. C. Ebert.

NOTE.—Measurements during 1911-12 were made about 2,000 feet above the gage. There is an inflow of 0.5 to 1.05 second-feet between the section and the gage. Beginning June 29, 1911, this inflow was closely estimated and added to the measured amount.

*Daily gage height, in feet, of Santa Ynez River near Santa Barbara, Cal., for 1903-1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903. | | | | | | | | 1903. | | | | | | | |
| 1 | 1.10 | 1.50 | 1.35 | 3.50 | 1.58 | 1.38 | ...... | 16 | 1.10 | 1.40 | 1.43 | 2.50 | 1.45 | 1.30 | ...... |
| 2 | 1.10 | 1.45 | 1.35 | 2.60 | 1.56 | 1.38 | ...... | 17 | 1.10 | 1.40 | 1.42 | 2.30 | 1.45 | 1.30 | ...... |
| 3 | 1.10 | 1.42 | 1.35 | 2.20 | 1.55 | 1.37 | ...... | 18 | 1.10 | 1.40 | 1.41 | 2.10 | 1.45 | 1.30 | ...... |
| 4 | 1.10 | 1.45 | 1.45 | 2.10 | 1.55 | 1.35 | ...... | 19 | 1.10 | 1.40 | 1.40 | 2.05 | 1.45 | 1.30 | ...... |
| 5 | 1.10 | 1.45 | 1.65 | 1.90 | 1.54 | 1.35 | ...... | 20 | 1.10 | 1.39 | 1.40 | 2.00 | 1.45 | 1.28 | ...... |
| 6 | 1.10 | 1.45 | 1.50 | 1.85 | 1.51 | 1.35 | ...... | 21 | 1.10 | 1.39 | 1.40 | 1.90 | 1.45 | ...... | ...... |
| 7 | 1.10 | 1.45 | 1.50 | 1.80 | 1.50 | 1.34 | ...... | 22 | 1.10 | 1.39 | 1.40 | 1.85 | 1.45 | ...... | ...... |
| 8 | 1.10 | 1.58 | 1.45 | 1.70 | 1.50 | 1.33 | ...... | 23 | 1.10 | 1.38 | 1.40 | 1.80 | 1.45 | ...... | ...... |
| 9 | 1.10 | 1.50 | 1.43 | 1.65 | 1.50 | 1.32 | ...... | 24 | 1.10 | 1.37 | 1.45 | 1.75 | 1.44 | ...... | ...... |
| 10 | 1.10 | 1.49 | 1.42 | 1.65 | 1.49 | 1.32 | ...... | 25 | 1.10 | 1.37 | 1.67 | 1.71 | 1.43 | ...... | ...... |
| 11 | 1.10 | 1.46 | 1.42 | 1.62 | 1.48 | 1.31 | ...... | 26 | 1.10 | 1.36 | 1.55 | 1.70 | 1.42 | ...... | ...... |
| 12 | 1.10 | 1.45 | 1.41 | 1.60 | 1.48 | 1.30 | 1.20 | 27 | 1.20 | 1.35 | 1.50 | 1.68 | 1.40 | ...... | ...... |
| 13 | 1.10 | 1.44 | 1.42 | 1.60 | 1.48 | 1.30 | ...... | 28 | 3.55 | 1.35 | 1.49 | 1.65 | 1.40 | ...... | ...... |
| 14 | 1.10 | 1.44 | 1.43 | 1.56 | 1.48 | 1.30 | ...... | 29 | 1.70 | ...... | 1.50 | 1.60 | 1.40 | ...... | ...... |
| 15 | 1.10 | 1.42 | 1.43 | 1.55 | 1.46 | 1.30 | ...... | 30 | 1.50 | ...... | 2.10 | 1.59 | 1.40 | ...... | ...... |
| | | | | | | | | 31 | 1.48 | ...... | 2.15 | ...... | 1.39 | ...... | ...... |

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | Sept. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | | | | | 1904. | | | | | | | |
| 1 | ...... | ...... | 2.21 | 2.36 | 2.40 | 2.09 | ...... | 16 | ...... | ...... | 2.40 | 2.26 | 2.20 | 2.16 | ...... |
| 2 | ...... | ...... | 2.13 | 2.34 | 2.38 | 2.08 | ...... | 17 | ...... | 2.82 | 2.23 | 2.20 | 2.13 | ...... | ...... |
| 3 | ...... | ...... | 2.12 | 2.32 | 2.33 | 2.06 | ...... | 18 | 2.20 | 2.24 | 2.21 | 2.20 | 2.15 | ...... | ...... |
| 4 | ...... | ...... | 2.09 | 2.31 | 2.34 | 2.05 | ...... | 19 | 2.07 | 2.22 | 2.20 | 3.08 | 2.12 | ...... | ...... |
| 5 | ...... | 2.28 | 2.09 | 2.31 | 2.32 | 2.05 | ...... | 20 | ...... | 2.21 | 2.20 | 2.78 | 2.13 | ...... | ...... |
| 6 | ...... | 2.27 | 2.09 | 2.27 | 2.30 | 2.03 | ...... | 21 | ...... | 2.05 | 2.18 | 2.56 | 2.12 | ...... | ...... |
| 7 | ...... | 2.15 | 2.08 | 2.26 | 2.27 | 2.02 | ...... | 22 | ...... | ...... | 2.18 | 2.47 | 2.12 | ...... | ...... |
| 8 | ...... | 2.15 | 2.08 | 2.25 | 2.24 | 2.02 | ...... | 23 | ...... | ...... | 3.80 | 2.44 | 2.12 | ...... | ...... |
| 9 | ...... | 2.10 | 2.09 | 2.25 | 2.23 | 2.02 | ...... | 24 | ...... | ...... | 2.83 | 2.39 | 2.11 | ...... | 3.00 |
| 10 | ...... | 2.08 | 2.70 | 2.23 | 2.22 | 2.01 | ...... | 25 | ...... | ...... | 2.66 | 2.37 | 2.15 | ...... | 3.20 |
| 11 | ...... | ...... | 2.70 | 2.21 | 2.21 | 2.00 | ...... | 26 | ...... | ...... | 2.52 | 2.40 | 2.14 | ...... | 3.00 |
| 12 | ...... | ...... | 2.44 | 2.20 | 2.20 | 2.00 | ...... | 27 | ...... | 3.12 | 2.45 | 2.47 | 2.12 | ...... | 2.60 |
| 13 | ...... | ...... | 2.36 | 2.20 | 2.20 | ...... | ...... | 28 | ...... | 3.00 | 2.44 | 2.42 | 2.10 | ...... | 2.50 |
| 14 | ...... | ...... | 2.30 | 2.20 | 2.19 | ...... | ...... | 29 | ...... | 2.30 | 2.47 | 2.46 | 2.10 | ...... | 2.45 |
| 15 | ...... | ...... | 2.28 | 2.19 | 2.20 | ...... | ...... | 30 | ...... | ...... | 2.44 | 2.43 | 2.09 | ...... | 2.40 |
| | | | | | | | | 31 | ...... | ...... | 2.40 | ...... | 2.09 | ...... | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904-5. | | | | | | | | | | | | |
| 1 | 2.37 | 2.18 | 2.20 | 2.3 | 2.5 | 3.1 | 3.25 | 2.65 | 2.4 | 2.06 | 2.0 | 1.9 |
| 2 | 2.32 | 2.19 | 2.20 | 2.3 | 3.6 | 3.05 | 3.25 | 2.7 | 2.4 | 2.06 | 2.0 | 1.9 |
| 3 | 2.30 | 2.19 | 2.21 | 2.25 | 8.4 | 3.0 | 3.2 | 2.65 | 2.4 | 2.06 | 2.0 | 1.85 |
| 4 | 2.27 | 2.19 | 2.21 | 2.25 | 6.8 | 3.0 | 3.15 | 2.6 | 2.4 | 2.06 | 2.0 | 1.85 |
| 5 | 2.26 | 2.19 | 2.21 | 2.25 | 4.0 | 3.05 | 3.15 | 2.6 | 2.4 | 2.06 | 2.0 | 1.85 |
| 6 | 2.27 | 2.19 | 2.20 | 2.25 | 3.9 | 3.1 | 3.1 | 2.6 | 2.4 | 2.06 | 2.0 | 1.85 |
| 7 | 2.36 | 2.19 | 2.21 | 2.2 | 3.75 | 3.0 | 3.1 | 2.6 | 2.4 | 2.06 | 2.0 | 1.85 |
| 8 | 2.38 | 2.19 | 2.20 | 3.8 | 3.7 | 2.9 | 3.05 | 2.6 | 2.4 | 2.05 | 2.0 | 1.85 |
| 9 | 2.34 | 2.19 | 2.21 | 3.7 | 3.65 | 2.9 | 3.05 | 2.6 | 2.35 | 2.06 | 2.0 | 1.85 |
| 10 | 2.32 | 2.19 | 2.21 | 2.6 | 3.65 | 2.85 | 3.06 | 2.6 | 2.35 | 2.06 | 2.0 | 1.85 |
| 11 | 2.29 | 2.19 | 2.21 | 2.55 | 3.6 | 2.9 | 3.0 | 2.6 | 2.35 | 2.06 | 2.0 | 1.85 |
| 12 | 2.26 | 2.19 | 2.21 | 2.5 | 3.6 | 4.7 | 3.06 | 2.6 | 2.3 | 2.06 | 2.0 | 1.85 |
| 13 | 2.26 | 2.19 | 2.21 | 2.45 | 3.6 | 8.9 | 3.0 | 2.55 | 2.3 | 2.06 | 2.0 | 1.85 |
| 14 | 2.24 | 2.20 | 2.20 | 2.4 | 3.55 | 5.65 | 2.95 | 2.55 | 2.25 | 2.06 | 2.0 | 1.85 |
| 15 | 2.22 | 2.20 | 2.20 | 2.45 | 3.4 | 4.65 | 2.95 | 2.55 | 2.25 | 2.06 | 2.0 | 1.85 |
| 16 | 2.21 | 2.20 | 2.20 | 2.5 | 4.45 | 5.3 | 2.9 | 2.55 | 2.2 | 2.06 | 1.95 | 1.85 |
| 17 | 2.20 | 2.20 | 2.21 | 2.45 | 6.55 | 4.65 | 2.9 | 2.55 | 2.2 | 2.06 | 1.95 | 1.85 |
| 18 | 2.20 | 2.20 | 2.21 | 2.4 | 4.0 | 4.4 | 2.9 | 2.5 | 2.2 | 2.06 | 1.95 | 1.85 |
| 19 | 2.20 | 2.20 | 2.21 | 2.4 | 3.75 | 4.15 | 2.85 | 2.5 | 2.15 | 2.06 | 1.95 | 1.85 |
| 20 | 2.20 | 2.22 | 2.21 | 2.4 | 3.7 | 4.0 | 2.85 | 2.5 | 2.15 | 2.06 | 1.95 | 1.85 |
| 21 | 2.19 | 2.22 | 2.21 | 4.25 | 3.65 | 3.8 | 2.85 | 2.5 | 2.15 | 2.06 | 1.95 | 1.85 |
| 22 | 2.19 | 2.21 | 2.21 | 3.15 | 3.5 | 3.75 | 2.8 | 2.5 | 2.1 | 2.06 | 1.95 | 1.85 |
| 23 | 2.18 | 2.21 | 2.21 | 2.9 | 3.4 | 3.65 | 2.8 | 2.5 | 2.1 | 2.06 | 1.95 | 1.8 |
| 24 | 2.18 | 2.21 | 2.21 | 2.8 | 3.3 | 3.6 | 2.8 | 2.5 | 2.1 | 2.06 | 1.9 | 1.8 |
| 25 | 2.18 | 2.21 | 2.21 | 2.75 | 3.2 | 3.55 | 2.75 | 2.45 | 2.1 | 2.06 | 1.9 | 1.8 |

## GATO CREEK.

Gato Creek was measured by Charles J. Johansen for the Pacific Improvement Co., as given below. It was gaged a short distance above its junction with the Loma Abajo, and at the time of its measurement no water was being conveyed in the pipe line situated along this stream.

*Discharge measurements of Gato Creek at mouth, Santa Barbara County, Cal., in [illegible]*

[By Charles J. Johansen.]

| Date. | Discharge. | Date. | Discharge. | Date. | Discharge. |
|---|---|---|---|---|---|
| | *Sec.-ft.* | | *Sec.-ft.* | | *Sec.-ft.* |
| [illegible] | [illegible] | May 12 | 0.53 | July 27 | [illegible] |
| [illegible] | [illegible] | 14 | .4 | 29 | [illegible] |
| [illegible] | [illegible] | 16 | .5 | 31 | [illegible] |
| [illegible] | [illegible] | 18 | .4 | Aug. 2 | [illegible] |
| [illegible] | [illegible] | 20 | .4 | 4 | [illegible] |
| [illegible] | [illegible] | 2? | .5 | 6 | [illegible] |
| [illegible] | [illegible] | 2? | .5 | 8 | [illegible] |
| [illegible] | [illegible] | 2? | .5 | 10 | [illegible] |
| [illegible] | [illegible] | 2? | .5 | 12 | [illegible] |
| [illegible] | [illegible] | 3? | .5 | 14 | [illegible] |
| [illegible] | [illegible] | June [illegible] | .5 | 1? | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | 17 | [illegible] |
| [illegible] | [illegible] | [illegible] | .5 | 1? | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | 2? | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | 2? | [illegible] |
| [illegible] | [illegible] | [illegible] | .5 | 2? | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | 27 | [illegible] |
| [illegible] | [illegible] | [illegible] | .5 | 29 | [illegible] |
| [illegible] | [illegible] | [illegible] | .5 | 31 | [illegible] |
| [illegible] | [illegible] | [illegible] | .5 | Sept. [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | 1? | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | 1? | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | 1? | [illegible] |
| [illegible] | [illegible] | [illegible] | .4 | 1? | [illegible] |
| [illegible] | [illegible] | [illegible] | .3 | 1? | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2? | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2? | [illegible] |
| [illegible] | [illegible] | [illegible] | .3 | 2? | [illegible] |
| [illegible] | [illegible] | [illegible] | .3 | 2? | [illegible] |
| [illegible] | [illegible] | [illegible] | .3 | 2? | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2? | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | .3 | [illegible] | [illegible] |

[illegible]

[illegible]

[illegible]

The staff gage, in three sections, is on the right bank, about 300 yards below the north portal of the Santa Barbara city waterworks tunnel. The gage datum was lowered 5.00 feet on April 13, 1911. All gage heights beginning January 1, 1911, refer to the new datum.

The channel is composed of sand and gravel and is fairly permanent. As no discharge measurements were made during 1907–10, no estimates of daily discharge have been prepared for 1909 or 1910.

The station is maintained by the city of Santa Barbara. The gage-height record has been furnished by the board of water commissioners through its engineer, Lee M. Hyde.

*Discharge measurements of Santa Ynez River near Santa Barbara, Cal., in 1903–1904, 1906, and 1911–12.*

[By H. Rankin, R. L. North, L. M. Hyde, and C. M. Watts.]

| Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. | Date. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|
| 1903. | Feet. | Sec.-ft. | 1903. | Feet. | Sec.-ft. | 1903. | Feet. | Sec.-ft |
| Jan. 12 | 1.10 | 1.8 | Mar. 27 | 1.50 | 17.1 | May 27 | 1.40 | 11.4 |
| 25 | 1.10 | 1.9 | 28 | 1.49 | 16.9 | 28 | 1.40 | 11.2 |
| 27 | 1.20 | 3.3 | 29 | 1.50 | 18.0 | 29 | 1.40 | 10.7 |
| 28 | 3.55 | 457 | 30 | 2.10 | 93 | 30 | 1.40 | 10.4 |
| 29 | 1.70 | 60 | 31 | 2.15 | 111 | June 1 | 1.38 | 8.7 |
| 30 | 1.50 | 22 | Apr. 1 | 3.50 | 535 | 2 | 1.38 | 8.5 |
| 31 | 1.48 | 17.9 | 2 | 2.60 | 242 | 3 | 1.37 | 7.8 |
| Feb. 1 | 1.50 | 22 | 3 | 2.20 | 137 | 4 | 1.35 | 7.1 |
| 2 | 1.45 | 16 | 4 | 2.10 | 114 | 5 | 1.35 | 7.0 |
| 3 | 1.42 | 14.6 | 5 | 1.90 | 73 | 6 | 1.35 | 7.0 |
| 4 | 1.45 | 15.3 | 6 | 1.85 | 57 | 8 | 1.33 | 6.0 |
| 5 | 1.45 | 14.9 | 7 | 1.80 | 53 | 9 | 1.32 | 5.7 |
| 7 | 1.45 | 15.6 | 8 | 1.70 | 44 | 10 | 1.32 | 4.9 |
| 8 | 1.58 | 25 | 9 | 1.65 | 43 | 11 | 1.31 | 4.9 |
| 9 | 1.50 | 18.4 | 10 | 1.65 | 38 | 12 | 1.30 | 4.9 |
| 10 | 1.49 | 17.6 | 11 | 1.62 | 38 | 13 | 1.30 | 4.9 |
| 11 | 1.46 | 16.1 | 12 | 1.60 | 34 | 15 | 1.30 | 4.7 |
| 12 | 1.45 | 15.5 | 14 | 1.56 | 30 | 16 | 1.30 | 4.4 |
| 13 | 1.44 | 14.9 | 15 | 1.55 | 29 | 17 | 1.30 | 4.4 |
| 14 | 1.44 | 14.7 | 16 | 2.50 | 175 | 18 | 1.30 | 4.4 |
| 16 | 1.40 | 10.8 | 17 | 2.30 | 136 | 20 | 1.28 | 3.1 |
| 17 | 1.40 | 11.3 | 18 | 2.10 | 95 | July 12 | 1.20 | 1.2 |
| 18 | 1.40 | 11.1 | 19 | 2.05 | 86 | Dec. 20 | (a) | .30 |
| 19 | 1.40 | 11 | 20 | 2.00 | 79 | 21 | (a) | .35 |
| 20 | 1.39 | 10.8 | 21 | 1.90 | 74 | 22 | (a) | .35 |
| 21 | 1.39 | 11 | 22 | 1.85 | 67 | 23 | (a) | .40 |
| 23 | 1.38 | 10.1 | 23 | 1.80 | 54 | 24 | (a) | .40 |
| 24 | 1.37 | 9 | 24 | 1.75 | 44 | 25 | (a) | .40 |
| 25 | 1.37 | 9.1 | 25 | 1.71 | 43 | 26 | (a) | .40 |
| 26 | 1.36 | 8.6 | 27 | 1.68 | 35 | 27 | (a) | .40 |
| 27 | 1.35 | 8.7 | 28 | 1.65 | 35 | 28 | (a) | .40 |
| 28 | 1.35 | 8.3 | 29 | 1.60 | 33 | 29 | (a) | .42 |
| Mar. 1 | 1.35 | 8.2 | 30 | 1.59 | 32 | 30 | (a) | .42 |
| 2 | 1.35 | 8 | May 2 | 1.56 | 28 | 31 | (a) | .42 |
| 3 | 1.35 | 7.9 | 3 | 1.55 | 27 | 1904. | | |
| 4 | 1.45 | 14.8 | 4 | 1.55 | 28 | Jan. 18 | 2.20 | 4.32 |
| 5 | 1.65 | 32 | 5 | 1.54 | 27 | 19 | 2.07 | 1.77 |
| 6 | 1.50 | 20 | 6 | 1.51 | 20 | Feb. 5 | 2.28 | 3.44 |
| 7 | 1.50 | 20 | 7 | 1.50 | 19.6 | 6 | ........ | 3.27 |
| 9 | 1.43 | 13.5 | 8 | 1.50 | 19.0 | 7 | 2.15 | 2.35 |
| 10 | 1.42 | 13.2 | 10 | 1.49 | 17.8 | 8 | 2.15 | 2.27 |
| 11 | 1.42 | 13.4 | 11 | 1.48 | 17.5 | 9 | 2.10 | 2.17 |
| 12 | 1.41 | 12.7 | 12 | 1.48 | 17.7 | 10 | 2.08 | 1.74 |
| 13 | 1.42 | 13.2 | 13 | 1.48 | 16.7 | 16 | ........ | 6.89 |
| 14 | 1.43 | 12.8 | 14 | 1.48 | 16.7 | 17 | ........ | 4.49 |
| 15 | 1.43 | 13.1 | 15 | 1.46 | 16.1 | 18 | ........ | 2.74 |
| 16 | 1.43 | 12.8 | 16 | 1.45 | 15.2 | 19 | ........ | 2.53 |
| 17 | 1.42 | 11.6 | 17 | 1.45 | 14.9 | 20 | ........ | 2.11 |
| 18 | 1.41 | 11.3 | 18 | 1.45 | 15.5 | 27 | ........ | 45.00 |
| 19 | 1.40 | 11.1 | 19 | 1.45 | 15.2 | 28 | 3.00 | 96.00 |
| 20 | 1.40 | 10.9 | 20 | 1.45 | 14.4 | 29 | 2.32 | 16.20 |
| 21 | 1.40 | 10.6 | 21 | 1.45 | 13.5 | Mar. 1 | ........ | 7.00 |
| 22 | 1.40 | 10.5 | 22 | 1.45 | 13.6 | 2 | ........ | 5.28 |
| 23 | 1.40 | 10.6 | 23 | 1.45 | 13.4 | 3 | ........ | 4.33 |
| 25 | 1.67 | 29 | 25 | 1.43 | 12.2 | 4 | ........ | 2.70 |
| 26 | 1.56 | 19.6 | 26 | 1.42 | 11.9 | | | |

a Weir.

## STREAM MEASUREMENTS [illegible]

[illegible]

| Day | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Day | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| 1903 | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 2.21 | 2.20 | 2.20 | 2.5 | 4.45 | 3.3 | 2.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | 2.20 | 2.20 | 2.21 | 2.45 | 6.35 | 4.65 | 2.9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | 2.20 | 2.20 | 2.21 | 2.4 | 4.0 | 4.4 | 2.9 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | 2.20 | 2.20 | 2.21 | 2.4 | 3.75 | 4.15 | 2.85 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | 2.20 | 2.22 | 2.21 | 2.4 | 3.7 | 4.0 | 2.85 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 2.19 | 2.22 | 2.21 | 4.25 | 3.65 | 3.8 | 2.85 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | 2.19 | 2.21 | 2.21 | 3.15 | 3.5 | 3.75 | 2.8 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | 2.18 | 2.21 | 2.21 | 2.9 | 3.4 | 3.65 | 2.8 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | 2.18 | 2.21 | 2.21 | 2.8 | 3.3 | 3.6 | 2.8 | 2.3 | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 2.18 | 2.21 | 2.21 | 2.75 | 3.2 | 3.55 | 2.75 | 2.40 | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

*aily gage height, in feet, of Santa Ynez River near Santa Barbara, Cal., for 1903–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Day. | Oct. | Nov. | Dec. | Jan. |
|---|---|---|---|---|---|---|---|---|---|
| 1907-8. | | | | | 1907-8. | | | | |
| | 1.81 | 2.05 | 1.91 | ........ | 16 | ........ | 1.97 | ........ | ........ |
| | ........ | ........ | ........ | ........ | 17 | ........ | 1.97 | 2.1 | 2.09 |
| | ........ | 2.0 | 1.92 | ........ | 18 | ........ | ........ | ........ | ........ |
| | ........ | ........ | ........ | 1.95 | 19 | ........ | 1.96 | 2.08 | ........ |
| | 1.81 | ........ | ........ | ........ | 20 | ........ | ........ | ........ | 2.06 |
| | ........ | 1.98 | 1.92 | ........ | 21 | 1.83 | ........ | ........ | ........ |
| | ........ | 1.98 | ........ | 1.94 | 22 | ........ | ........ | ........ | ........ |
| | 1.82 | ........ | ........ | ........ | 23 | ........ | 1.94 | 2.08 | 2.04 |
| | ........ | ........ | 2.3 | 1.93 | 24 | 2.01 | ........ | ........ | ........ |
| | ........ | 1.97 | ........ | ........ | 25 | 1.99 | ........ | 2.06 | 6.40 |
| | ........ | ........ | 2.15 | 1.93 | 26 | 2.3 | ........ | ........ | 5.00 |
| | ........ | 1.98 | ........ | ........ | 27 | 3.42 | 1.92 | 2.05 | 5.00 |
| | ........ | ........ | ........ | 1.92 | 28 | 2.4 | ........ | 2.0 | 4.00 |
| | ........ | 1.98 | 2.12 | 2.17 | 29 | ........ | 1.91 | 2.0 | 3.01 |
| | ........ | ........ | ........ | 2.12 | 30 | 2.21 | 1.9 | ........ | 2.78 |
| | | | | | 31 | ........ | ........ | 1.98 | 2.61 |

| Day. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1910. | | | | | | | | |
| | ........ | 2.0 | ........ | ........ | 1.45 | 1.25 | 1.05 | 1.0 |
| | ........ | 2.0 | ........ | ........ | 1.45 | 1.25 | 1.05 | 1.0 |
| | ........ | 2.0 | ........ | ........ | 1.45 | 1.2 | 1.05 | 1.0 |
| | ........ | 2.0 | 2.25 | ........ | 1.4 | 1.2 | 1.05 | 1.0 |
| | ........ | 2.0 | 2.25 | ........ | 1.4 | 1.2 | 1.05 | 1.0 |
| | 2.0 | 1.95 | 2.25 | ........ | 1.4 | 1.2 | 1.05 | 1.0 |
| | 2.0 | 1.95 | 2.25 | ........ | 1.4 | 1.2 | 1.05 | 1.0 |
| | 2.0 | 1.95 | 2.2 | ........ | 1.4 | 1.2 | 1.05 | 1.0 |
| | 2.0 | 1.95 | 2.2 | ........ | 1.4 | 1.2 | 1.05 | 1.0 |
| | 2.0 | 1.95 | 2.2 | ........ | 1.4 | 1.15 | 1.05 | 1.0 |
| | 2.0 | 1.95 | 2.1 | 1.7 | 1.4 | 1.15 | 1.05 | 1.0 |
| | 2.0 | 1.95 | 2.05 | 1.7 | 1.4 | 1.1 | 1.05 | 1.0 |
| | 2.0 | 1.95 | 2.05 | 1.7 | 1.4 | 1.1 | 1.05 | 1.0 |
| | 2.0 | 2.0 | 2.05 | 1.7 | 1.4 | 1.1 | 1.05 | 1.0 |
| | 2.0 | 2.0 | 2.05 | 1.7 | 1.4 | 1.1 | 1.05 | 1.8 |
| | 2.0 | 1.95 | 2.05 | 1.7 | 1.4 | 1.1 | 1.05 | 1.8 |
| | 2.0 | 1.95 | 2.0 | 1.55 | 1.4 | 1.1 | 1.05 | 1.6 |
| | 2.0 | 1.95 | 2.0 | 1.65 | 1.4 | 1.1 | 1.05 | 1.4 |
| | 2.0 | 1.95 | 2.0 | 1.65 | 1.4 | 1.1 | 1.05 | 1.2 |
| | 2.0 | 1.95 | 2.0 | 1.65 | 1.35 | 1.1 | 1.05 | 1.2 |
| | 2.0 | 1.95 | 2.0 | 1.65 | 1.35 | 1.1 | 1.05 | 1.2 |
| | 2.0 | | 2.0 | 1.6 | 1.35 | 1.1 | 1.05 | 1.2 |
| | 2.0 | ........ | 2.0 | 1.6 | 1.35 | 1.1 | 1.05 | 1.2 |
| | 2.0 | 2.0 | 2.0 | 1.6 | 1.3 | 1.1 | 1.05 | 1.15 |
| | 2.0 | 2.8 | ........ | 1.6 | 1.3 | 1.1 | 1.05 | ........ |
| | 2.0 | 2.8 | ........ | 1.6 | 1.3 | 1.1 | 1.0 | ........ |
| | 2.0 | 2.9 | ........ | 1.55 | 1.25 | 1.1 | 1.0 | ........ |
| | 2.0 | 2.0 | ........ | 1.55 | 1.25 | 1.1 | 1.0 | ........ |
| | ........ | ........ | ........ | 1.55 | 1.2 | 1.05 | 1.0 | ........ |
| | ........ | ........ | ........ | 1.5 | 1.25 | 1.05 | 1.0 | ........ |
| | ........ | ........ | ........ | 1.5 | ........ | 1.05 | 1.0 | ........ |

*Daily gage height, in feet, of Santa Ynez River near Santa Barbara, Cal., for 1903–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11 | | | | | | | | | | | | |
| 1 | | 1.1 | 1.2 | 6.21 | 8.55 | 8.45 | 6.18 | 5.37 | 5.00 | [illegible] | [illegible] | |
| 2 | | 1.1 | 1.2 | 6.21 | 7.90 | 8.85 | 6.15 | ...... | ...... | 4.76 | 4.56 | [illegible] |
| 3 | | 1.1 | 1.2 | 6.21 | 8.35 | 9.95 | 6.13 | 5.32 | 4.99 | ...... | 4.56 | [illegible] |
| 4 | | 1.15 | 1.2 | 6.21 | 9.75 | 10.10 | ...... | 5.31 | 4.98 | ...... | ...... | [illegible] |
| 5 | | 1.15 | 1.2 | 6.21 | 9.00 | 10.65 | 6.07 | 5.29 | 4.96 | 4.75 | ...... | [illegible] |
| 6 | | 1.15 | 1.2 | 6.21 | 8.70 | 10.95 | 6.04 | 5.27 | 4.96 | 4.77 | [illegible] | [illegible] |
| 7 | | 1.15 | 1.2 | 6.21 | 8.20 | 11.35 | 5.98 | 5.25 | 4.95 | 4.77 | [illegible] | |
| 8 | | [illegible] | 1.2 | 6.21 | 8.10 | 14.10 | 5.90 | 5.25 | 4.94 | 4.72 | [illegible] | [illegible] |
| 9 | | [illegible] | 1.2 | 6.35 | 8.10 | 20.00 | 5.86 | 5.22 | 4.93 | 4.72 | [illegible] | [illegible] |
| 10 | | 1.2 | 1.2 | 8.10 | 8.00 | 12.45 | 5.82 | 5.20 | 4.92 | 4.72 | [illegible] | [illegible] |
| 11 | | 1.2 | 1.2 | [illegible] | 8.40 | 10.40 | 5.79 | 5.20 | 4.91 | [illegible] | [illegible] | [illegible] |
| 12 | 1 | 1.2 | 1.2 | [illegible] | 8.20 | [illegible] | 5.77 | 5.19 | ...... | [illegible] | [illegible] | [illegible] |
| 13 | 1 | 1.2 | 1.2 | [illegible] | 8.00 | 8.90 | 5.72 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 1 | 1.2 | 1.2 | [illegible] | 8.20 | ...... | 5.70 | 5.17 | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 1 | 1.2 | 1.2 | 7.80 | 8.00 | 7.90 | 5.67 | 5.16 | [illegible] | 4.69 | [illegible] | [illegible] |
| 16 | 1 | 1.2 | 1.2 | 7.07 | 7.85 | 7.65 | 5.65 | 5.15 | 4.89 | [illegible] | [illegible] | [illegible] |
| 17 | 1 | 1.2 | 1.2 | ...... | 7.80 | 7.55 | 5.62 | 5.14 | 4.88 | ...... | [illegible] | [illegible] |
| 18 | 1 | 1.2 | 1.2 | [illegible] | 7.75 | 7.50 | 5.59 | 5.12 | 4.87 | 4.67 | [illegible] | |
| 19 | 1 | 1.2 | 1.2 | [illegible] | 7.70 | 7.40 | 5.57 | 5.11 | 4.85 | [illegible] | [illegible] | [illegible] |
| 20 | 1 | 1.2 | 1.2 | [illegible] | 7.73 | 7.28 | 5.53 | 5.10 | 4.84 | 4.66 | [illegible] | [illegible] |
| 21 | 1 | 1.2 | 1.2 | [illegible] | 7.64 | 7.30 | 5.51 | 5.09 | 4.84 | [illegible] | 4.55 | [illegible] |
| 22 | 1 | 1.2 | 1.2 | [illegible] | 7.60 | 7.00 | 5.50 | 5.06 | 4.83 | 4.65 | 4.53 | [illegible] |
| 23 | 1 | 1.2 | ...... | [illegible] | 7.52 | 6.80 | 5.49 | 5.06 | 4.83 | 4.65 | 4.53 | [illegible] |
| 24 | 1 | 1.2 | 1.2 | [illegible] | 7.47 | 6.70 | 5.48 | 5.04 | 4.83 | 4.65 | [illegible] | [illegible] |
| 25 | 1 | 1.2 | 1.2 | 8.00 | 7.41 | 6.62 | 5.46 | 5.04 | 4.82 | 4.64 | 4.52 | [illegible] |
| 26 | 1 | 1.2 | 1.25 | [illegible] | [illegible] | 6.53 | 5.44 | 5.04 | 4.81 | 4.62 | [illegible] | [illegible] |
| 27 | 1 | 1.2 | 1.25 | [illegible] | 7.42 | 6.50 | 5.45 | 5.03 | 4.81 | 4.61 | [illegible] | [illegible] |
| 28 | 1 | 1.2 | 1.25 | 8.55 | 7.68 | 6.43 | 5.41 | 5.01 | 4.81 | 4.60 | [illegible] | [illegible] |
| 29 | 1 | 1.2 | 1.25 | 12.30 | ...... | 6.35 | 5.40 | 5.01 | 4.80 | 4.60 | [illegible] | [illegible] |
| 30 | 1 | 1.2 | [illegible] | 10.80 | ...... | 6.27 | 5.38 | 5.00 | 4.78 | 4.59 | [illegible] | [illegible] |
| 31 | 1 | ...... | 1.2 | 10.50 | ...... | 6.20 | ...... | 5.00 | ...... | 4.59 | 4.50 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | | | |
| 1 | 4.52 | 4.65 | 4.80 | 4.83 | 4.85 | 4.8 | 5.08 | 5.03 | [illegible] |
| 2 | 4.52 | 4.65 | 4.80 | 4.83 | 4.85 | 4.8 | 5.06 | 5.02 | [illegible] |
| 3 | 4.52 | ...... | 4.80 | 4.83 | ...... | 5.0 | 5.04 | 5.02 | [illegible] |
| 4 | 4.52 | 4.65 | ...... | 4.83 | 4.86 | [illegible] | 5.02 | 5.02 | [illegible] |
| 5 | 4.52 | 4.65 | 4.82 | 4.83 | 4.84 | [illegible] | 5.0 | 5.02 | [illegible] |
| 6 | 4.53 | 4.65 | 4.95 | 4.84 | 4.83 | 6.25 | 5.0 | 4.9 | [illegible] |
| 7 | 4.53 | 4.65 | 4.85 | 4.84 | 4.83 | 5.35 | 5.0 | 4.9 | ...... |
| 8 | 4.53 | 4.65 | 4.85 | 4.84 | 4.83 | [illegible] | 4.98 | 5.0 | ...... |
| 9 | ...... | 4.65 | 4.85 | 4.84 | 4.83 | 5.35 | 4.98 | ...... | [illegible] |
| 10 | ...... | 4.65 | 4.85 | 4.84 | 4.82 | 5.8 | ...... | [illegible] | [illegible] |
| 11 | 4.53 | 4.68 | 4.85 | 4.86 | 4.82 | 5.28 | 5.7 | [illegible] | [illegible] |
| 12 | [illegible] | 4.73 | 4.83 | 4.86 | 4.82 | 6.75 | [illegible] | [illegible] | [illegible] |
| 13 | 4.53 | 4.77 | 4.83 | 4.86 | 4.82 | 8.0 | 5.4 | [illegible] | [illegible] |
| 14 | 4.53 | 4.78 | 4.82 | 4.86 | 4.82 | 5.7 | 5.32 | [illegible] | [illegible] |
| 15 | 4.53 | 4.79 | 4.82 | ...... | 4.82 | 5.5 | 5.24 | [illegible] | [illegible] |
| 16 | 4.53 | 4.79 | 4.82 | 4.86 | 4.82 | 5.38 | 5.27 | [illegible] | [illegible] |
| 17 | 4.53 | 4.79 | 4.83 | 4.86 | 4.82 | 5.3 | 5.22 | [illegible] | [illegible] |
| 18 | 4.52 | 4.79 | 4.83 | 4.85 | 4.81 | 5.22 | 5.22 | 4.9 | [illegible] |
| 19 | 4.52 | 4.79 | 4.83 | 4.85 | 4.81 | ...... | 5.22 | 4.9 | [illegible] |
| 20 | 4.52 | 4.80 | 4.83 | [illegible] | 4.81 | 5.2 | 5.17 | 4.9 | [illegible] |
| 21 | [illegible] | [illegible] | 4.83 | 4.85 | 4.81 | 5.13 | 5.15 | 4.9 | [illegible] |
| 22 | 4.52 | ...... | 4.83 | 4.85 | 4.8 | 5.13 | 5.12 | 4.9 | [illegible] |
| 23 | ...... | 4.80 | 4.83 | 4.85 | 4.8 | 5.1 | [illegible] | 4.9 | [illegible] |
| 24 | [illegible] | 4.80 | 4.83 | 4.85 | 4.8 | 5.08 | [illegible] | [illegible] | [illegible] |
| 25 | 4.52 | 4.81 | ...... | 4.86 | 4.8 | 5.08 | 5.07 | 5.02 | [illegible] |
| 26 | 4.54 | 4.81 | ...... | [illegible] | 4.8 | 5.12 | [illegible] | 5.02 | [illegible] |
| 27 | [illegible] | 4.81 | 4.83 | [illegible] | 4.8 | [illegible] | 5.06 | 5.0 | [illegible] |
| 28 | [illegible] | 4.81 | 4.83 | 4.86 | 4.8 | 5.13 | 5.08 | 4.9 | [illegible] |
| 29 | [illegible] | 4.80 | 4.84 | 4.86 | 4.8 | 5.11 | 5.06 | [illegible] | [illegible] |
| 30 | [illegible] | 4.80 | 4.83 | 4.86 | ...... | 5.1 | 5.06 | [illegible] | [illegible] |
| 31 | [illegible] | ...... | 4.83 | 4.86 | ...... | 5.08 | ...... | [illegible] | |

NOTE.—No record June 21 to Nov. 3, 1903. Discharge measured over weir Dec. 21, 1903 to Jan. 17, 1904, [illegible] to Feb. 4, Feb. 11–15, 22–26, June 13–30, and July 1–14, 1904. River dry Nov. 3 to Dec. 20, 1903, and [illegible] to Sept. 28, 1904. Station moved to Gibraltar dam site on Nov. 3, 1908, 5 miles below former location. After Jan. 1, 1911, gage heights refer to new gage installed Apr. 18, 1911. The datum of the new gage [illegible] lower than that of the old gage.

*Rating tables for Santa Ynez River near Santa Barbara, Cal.*

**January 1, 1904, to February 2, 1905.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 2.00 | 0.4 | 2.60 | 38 | 3.20 | 154 | 3.80 | 401 |
| 2.10 | 2.8 | 2.70 | 50 | 3.30 | 186 | 3.90 | 451 |
| 2.20 | 6.4 | 2.80 | 65 | 3.40 | 222 | 4.00 | 502 |
| 2.30 | 11.6 | 2.90 | 82 | 3.50 | 263 | | |
| 2.40 | 18.5 | 3.00 | 103 | 3.60 | 306 | | |
| 2.50 | 28 | 3.10 | 126 | 3.70 | 353 | | |

**February 3 to December 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.80 | 1 | 3.00 | 153 | 4.20 | 875 | 5.80 | 2,790 |
| 1.90 | 2 | 3.10 | 184 | 4.30 | 965 | 6.00 | 3,070 |
| 2.00 | 3 | 3.20 | 220 | 4.40 | 1,065 | 6.20 | 3,360 |
| 2.10 | 5 | 3.30 | 265 | 4.50 | 1,175 | 6.40 | 3,650 |
| 2.20 | 10 | 3.40 | 315 | 4.60 | 1,285 | 6.60 | 3,940 |
| 2.30 | 19 | 3.50 | 370 | 4.70 | 1,395 | 6.80 | 4,230 |
| 2.40 | 30 | 3.60 | 430 | 4.80 | 1,510 | 7.00 | 4,520 |
| 2.50 | 44 | 3.70 | 495 | 4.90 | 1,630 | 7.50 | 5,245 |
| 2.60 | 60 | 3.80 | 565 | 5.00 | 1,750 | 8.00 | 5,970 |
| 2.70 | 79 | 3.90 | 635 | 5.20 | 1,990 | 8.50 | 6,695 |
| 2.80 | 100 | 4.00 | 710 | 5.40 | 2,250 | 9.00 | 7,420 |
| 2.90 | 125 | 4.10 | 790 | 5.60 | 2,510 | | |

NOTE.—Table applicable only to open channel. It is based on discharge measurements made during January, February, and March, 1906.

**January 1, 1906, to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.80 | 1 | 2.20 | 12 | 2.60 | 65 | 3.00 | 156 |
| 1.90 | 2 | 2.30 | 22 | 2.70 | 83 | 3.10 | 186 |
| 2.00 | 3 | 2.40 | 35 | 2.80 | 104 | 3.20 | 223 |
| 2.10 | 6 | 2.50 | 49 | 2.90 | 129 | | |

NOTE.—This table is based on discharge measurements made during 1906 and is fairly well defined. Above gage height 3.20 it is the same as the 1905 table.

*Daily discharge, in second-feet, of Santa Ynez River near Santa Barbara, Cal., for 1911-12.*

| Day. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Day. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | | | | | 1911. | | | | | | | |
| 1 | ...... | 377 | 137 | 62 | 27 | 8 | 4 | 16 | 1,230 | 209 | 90 | 44 | 15 | 7 | 4 |
| 2 | ...... | 366 | 132 | 61 | 26 | 7 | 4 | 17 | 1,160 | 201 | 88 | 43 | 15 | 7 | 4 |
| 3 | ...... | 360 | 126 | 60 | 25 | 7 | 4 | 18 | 1,120 | 192 | 84 | 42 | 15 | 7 | 4 |
| 4 | ...... | 350 | 123 | 59 | 25 | 7 | 4 | 19 | 1,050 | 187 | 82 | 38 | 14 | 7 | 4 |
| 5 | ...... | 339 | 119 | 56 | 24 | 8 | 4 | 20 | 966 | 177 | 80 | 37 | 14 | 6 | 4 |
| 6 | ...... | 329 | 115 | 56 | 24 | 8 | 4 | 21 | 980 | 172 | 78 | 37 | 14 | 6 | 4 |
| 7 | ...... | 309 | 110 | 54 | 22 | 8 | 4 | 22 | 780 | 169 | 73 | 36 | 14 | 6 | 4 |
| 8 | ...... | 283 | 110 | 52 | 21 | 8 | 4 | 23 | 655 | 166 | 73 | 36 | 14 | 6 | 4 |
| 9 | ...... | 271 | 104 | 51 | 21 | 8 | 4 | 24 | 600 | 164 | 69 | 36 | 14 | 6 | 4 |
| 10 | ...... | 258 | 100 | 49 | 21 | 8 | 4 | 25 | 560 | 159 | 69 | 34 | 13 | 5 | 4 |
| 11 | ...... | 249 | 100 | 48 | 19 | 9 | 4 | 26 | 515 | 154 | 69 | 32 | 11 | 6 | 4 |
| 12 | ...... | 243 | 98 | 46 | 19 | 9 | 4 | 27 | 500 | 156 | 67 | 32 | 10 | 6 | 4 |
| 13 | ...... | 229 | 98 | 44 | 18 | 8 | 4 | 28 | 471 | 146 | 64 | 32 | 9 | 5 | 4 |
| 14 | ...... | 223 | 94 | 43 | 18 | 8 | 4 | 29 | 439 | 144 | 64 | 31 | 9 | 5 | 4 |
| 15 | 1,350 | 215 | 92 | 43 | 17 | 8 | 4 | 30 | 409 | 139 | 62 | 28 | 8 | 4 | 5 |
| | | | | | | | | 31 | 384 | ...... | 62 | ...... | 8 | 4 | ...... |

*Daily discharge, in second-feet, of Santa Ynez River near Santa Barbara, Cal., for 1911-12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | |
| 31 | [illegible] | | [illegible] | [illegible] | | [illegible] | | [illegible] | |

NOTE.—Daily discharge determined from five fairly well defined rating curves applicable as follows: [illegible]. Discharge interpolated on days for which there is no gage height.

*Monthly discharge of Santa Ynez River above Mono Creek, near Santa Barbara, Cal., for 1912.*

[Drainage area, [illegible] square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| January | [illegible] | 2 | 19 | [illegible] | [illegible] | [illegible] |
| February | 25 | [illegible] | 14 | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | 9 | [illegible] | [illegible] | [illegible] | [illegible] |
| June 1-20 | [illegible] | 3 | 6 | [illegible] | [illegible] | [illegible] |
| The period | | | | | | [illegible] |

*Monthly discharge of Santa Ynez River near Santa Barbara, Cal., for 1904-1907 and 1911-12.*

[Drainage area, 207 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1904.** | | | | | | | |
| January 7-31 | 6.4 | 0.5 | 0.9 | 0.004 | 0.01 | 45 | |
| February | 131 | .6 | 12 | .058 | .06 | 690 | |
| March | 445 | 2.3 | 30.2 | .146 | .17 | 1,857 | |
| April | 121 | 6.0 | 18.9 | .091 | .10 | 1,125 | |
| May | 18.5 | 2.6 | 6.8 | .033 | .04 | 418 | |
| June | 2.6 | .1 | .7 | .003 | .00 | 42 | |
| July | .1 | .0 | .034 | .000 | .00 | 2 | |
| August | .0 | .0 | .0 | .000 | .00 | 0 | |
| September | 5,450 | .0 | 193 | .832 | 1.04 | 11,484 | |
| The period | | | | | | 15,700 | |
| **1904-5.** | | | | | | | |
| October | 17 | 5.6 | 8.7 | .042 | .05 | 535 | |
| November | 7.4 | 5.6 | 6.4 | .031 | .04 | 381 | |
| December | 12.8 | 6.4 | 7.0 | .034 | .04 | 430 | |
| January | 635 | 6.4 | 73.8 | .357 | .41 | 4,538 | |
| February | 6,550 | 28 | 905 | 4.37 | 4.55 | 50,280 | |
| March | 7,275 | 112 | 797 | 3.85 | 4.44 | 49,010 | |
| April | 242 | 79 | 143 | .691 | .77 | 8,509 | |
| May | 100 | 37 | 52.5 | .254 | .29 | 3,228 | |
| June | 30 | 5 | 15.9 | .077 | .09 | 946 | |
| July | 4 | 3 | 3.8 | .018 | .02 | 234 | |
| August | 3 | 2 | 2.6 | .013 | .02 | 160 | |
| September | 2 | 1 | 1.4 | .0068 | .01 | 83 | |
| The year | 7,275 | 1 | 168 | .812 | 10.74 | 118,000 | |
| **1905-6.** | | | | | | | |
| October | 1 | 1 | 1.0 | 0.0048 | .01 | 61 | |
| November | 5 | 1 | 2.1 | .010 | .01 | 125 | |
| December | 4 | 4 | 4.0 | .019 | .02 | 246 | |
| January | 104 | 3 | 14.8 | .071 | .08 | 910 | |
| February | 171 | 6 | 27.4 | .132 | .14 | 1,520 | |
| March | 4,810 | 17 | 1,050 | 5.07 | 5.84 | 64,600 | |
| April | 430 | 65 | 158 | .763 | .85 | 9,400 | |
| May | 635 | 28 | 67.4 | .326 | .38 | 4,140 | |
| June | 49 | 12 | 23.9 | .115 | .13 | 1,420 | |
| July | 12 | 2.5 | 5.7 | .028 | .03 | 350 | |
| August | 2.5 | 1.0 | 1.4 | .0068 | .01 | 86 | |
| September | 1 | 1 | 1 | .0048 | .01 | 60 | |
| The year | 4,810 | 1 | 113 | .546 | 7.51 | 82,900 | |
| **1906-7.** | | | | | | | |
| October | 1 | 1 | 1 | .0048 | .01 | 61 | |
| November | 2.5 | 1 | 1.4 | .0068 | .01 | 83 | |
| December | 600 | 2 | 52.1 | .252 | .29 | 3,200 | |
| January | 9,450 | 49 | 1,470 | 7.10 | 8.19 | 90,400 | B. |
| February | 920 | 142 | 490 | 2.37 | 2.47 | 27,200 | B. |
| March | 8,150 | 104 | 1,520 | 7.34 | 8.46 | 93,500 | B. |
| April | 670 | 65 | 237 | 1.14 | 1.27 | 14,100 | B. |
| The period | | | | | | 229,000 | |
| **1907.** | | | | | | | |
| October | 315 | 1 | 14.4 | 0.070 | .08 | 885 | B. |
| November | 4 | 2 | 2.7 | .013 | .01 | 161 | B. |
| December | 22 | 2 | 5.6 | .027 | .03 | 344 | B. |
| **1911.** | | | | | | | |
| March 15-31 | 1,350 | 384 | 775 | 3.74 | 2.36 | 26,100 | B. |
| April | 377 | 139 | 231 | 1.12 | 1.25 | 13,700 | A. |
| May | 137 | 62 | 91.4 | .442 | .51 | 5,620 | A. |
| June | 62 | 28 | 44.1 | .213 | .24 | 2,620 | B. |
| July | 27 | 8 | 16.9 | .082 | .09 | 1,040 | B. |
| August | 9 | 4 | 6.8 | .033 | .04 | 418 | C. |
| September | 5 | 4 | 4.0 | .019 | .02 | 238 | D. |
| The period | | | | | | 49,700 | |

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible] station was established [illegible]

[illegible] station [illegible] was established. [illegible] water were [illegible] water [illegible] stream. [illegible] drainage area above [illegible] pumping plant [illegible] water [illegible] from wells [illegible] stream.

[illegible] gage [illegible] station was established.

[illegible] extremely [illegible] stream shifts constantly [illegible]

[illegible] Santa Barbara [illegible] engineer.

*Discharge measurements of Santa Ynez River near Lompoc, Cal., in 1906–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1906. | | *Feet.* | *Sec.-ft.* |
| Nov. 10 | R. S. Hawley | 5.02 | 10 |
| Dec. 12 | L. M. Hyde | 5.88 | 259 |
| 1907. | | | |
| Sept. 24 | Clapp and Hyde | 2.75 | 30 |
| 1908. | | | |
| Jan. 28 | L. M. Hyde | 4.80 | 3,480 |
| 29 | .....do | 3.85 | 1,490 |
| Mar. 10 | W. F. Martin | 3.28 | 418 |
| 1909. | | | |
| Jan. 23 | McDonald and Hyde | 4.25 | 2,290 |
| 23 | .....do | 4.15 | 1,850 |
| 24 | .....do | 3.85 | 1,150 |
| 25 | .....do | 4.35 | 2,560 |
| 26 | .....do | 6.65 | 11,100 |
| 26 | .....do | 6.9 | 10,800 |
| 26 | .....do | 8.15 | 15,700 |
| 26 | .....do | 8.5 | 18,500 |
| 27 | McDonald and Dyer | 6.25 | 8,040 |
| 27 | Donald McDonald and H. M. McDonald | 5.95 | 6,640 |
| 1910. | | | |
| Jan. 30 | W. B. Clapp | 4.10 | 309 |
| Mar. 5 | J. E. Stewart | 3.84 | 112 |
| Apr. 15 | D. McDonald | 4.00 | 135 |
| May 4 | .....do | 3.90 | 98 |
| 27 | .....do | 3.80 | 58 |
| 1910. | | *Feet.* | *Sec.-ft.* |
| June 9 | J. E. Stewart | 3.79 | 40 |
| 9 | .....do | 3.79 | 42 |
| Aug. 4 | D. McDonald | 3.55 | 20 |
| Sept. 14 | C. C. Jacob | 3.60 | 22 |
| 1911. | | | |
| Feb. 27 | W. V. Hardy | 4.85 | 548 |
| Mar. 2 | Donald McDonald | 6.50 | 4,930 |
| 22 | .....do | 2.80 | 1,870 |
| Apr. 11 | .....do | 2.90 | 765 |
| May 10 | .....do | 3.00 | 389 |
| June 7 | .....do | 3.00 | 243 |
| July 11 | .....do | 2.90 | 127 |
| Aug. 19 | .....do | 2.75 | 55 |
| Sept. 8 | .....do | 2.70 | 47 |
| 8 | F. C. Ebert | 2.70 | 48 |
| Oct. 11 | Donald McDonald | 2.70 | 37 |
| Nov. 13 | .....do | 2.72 | 45 |
| Dec. 7 | .....do | 2.80 | 67 |
| 1912. | | | |
| Jan. 18 | Donald McDonald | 2.77 | 61 |
| Feb. 10 | .....do | 2.72 | 53 |
| 25 | .....do | 2.79 | 42 |
| 25 | F. C. Ebert | 2.79 | 43 |
| Mar. 6 | Donald McDonald | 3.26 | 199 |
| Apr. 13 | .....do | 3.30 | 407 |
| May 16 | .....do | 2.87 | 89 |
| June 7 | F. C. Ebert | 2.86 | 54 |
| 10 | Donald McDonald | 2.86 | 44 |

*Daily gage height, in feet, of Santa Ynez River near Lompoc, Cal., for 1906–1912.*

| Day. | Nov. | Dec. | Jan. | Sept. |
|---|---|---|---|---|
| 1906–7. | | | | |
| 1 | | 5.1 | 6.1 | |
| 2 | | 5.1 | 5.95 | |
| 3 | | 5.1 | 5.85 | |
| 4 | | 5.1 | 5.8 | |
| 5 | | 5.1 | 5.95 | |
| 6 | | 5.1 | 6.0 | |
| 7 | | 5.1 | 6.9 | |
| 8 | | 5.1 | 16.2 | |
| 9 | | 5.1 | 20.5 | |
| 10 | 5.0 | 5.1 | | |
| 11 | 5.0 | 5.3 | | |
| 12 | 5.0 | 6.2 | | |
| 13 | 5.0 | 6.2 | | |
| 14 | 5.0 | 5.85 | | |
| 15 | 5.0 | 5.65 | | |
| 16 | 5.0 | 5.5 | | |
| 17 | 5.0 | 5.45 | | |
| 18 | 5.0 | 5.35 | | |
| 19 | 5.0 | 5.35 | | |
| 20 | 5.0 | 5.35 | | |
| 21 | 5.0 | 5.3 | | |
| 22 | 5.0 | 5.3 | | |
| 23 | 5.0 | 5.3 | | |
| 24 | 5.0 | 5.3 | | |
| 25 | 5.05 | 5.3 | | 2.75 |
| 26 | 5.05 | 5.3 | | 2.75 |
| 27 | 5.1 | 5.6 | | 2.75 |
| 28 | 5.1 | 6.75 | | 2.75 |
| 29 | 5.1 | 6.4 | | 2.75 |
| 30 | 5.1 | 6.25 | | 2.75 |
| 31 | | 6.15 | | |

*Daily gage height, in feet, of Santa Ynez River near Lompoc, Cal., for 1906–1912*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 3.9 | 3.9 | 4.0 | 7.65 | 4.0 | 3.9 | 4.4 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 2 | 3.9 | 3.9 | 4.0 | 5.0 | 4.0 | 3.8 | 4.3 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 3 | 3.9 | 3.9 | 4.0 | 4.8 | 4.0 | 3.8 | 4.3 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 4 | 3.9 | 3.9 | 4.0 | 4.5 | 4.0 | 3.8 | 4.2 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 5 | 3.9 | 3.9 | 4.0 | 4.4 | 3.9 | 3.8 | 4.2 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 6 | 3.9 | 3.9 | 4.0 | 4.4 | 3.9 | 3.85 | 4.2 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 7 | 3.9 | 3.9 | 4.1 | 4.4 | 3.9 | 3.85 | 4.2 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 8 | 3.9 | 3.9 | 4.1 | 4.3 | 3.9 | 3.8 | 4.2 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 9 | 3.9 | 3.9 | 4.9 | 4.3 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 10 | 3.9 | 3.9 | 4.8 | 4.2 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 11 | 3.9 | 3.9 | 4.5 | 4.1 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 12 | 3.9 | 3.9 | 4.4 | 4.1 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 13 | 3.9 | 3.9 | 4.3 | 4.0 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 14 | 3.9 | 4.0 | 4.2 | 4.0 | 3.9 | 3.9 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 15 | 3.9 | 4.0 | 4.2 | 4.3 | 3.9 | 3.85 | 4.0 | 3.9 | 3.8 | 3.6 | 3.55 | 3.7 |
| 16 | 3.9 | 4.0 | 4.2 | 4.4 | 3.9 | 3.8 | 4.0 | 3.9 | 3.8 | 3.6 | 3.6 | 3.7 |
| 17 | 3.9 | 4.0 | 4.2 | 4.7 | 3.9 | 3.8 | 4.0 | 3.8 | 3.75 | 3.6 | 3.6 | 3.7 |
| 18 | 3.9 | 4.0 | 4.1 | 4.5 | 3.9 | 3.9 | 4.0 | 3.8 | 3.75 | 3.6 | 3.6 | 3.65 |
| 19 | 3.9 | 4.0 | 4.1 | 4.4 | 3.9 | 3.9 | 4.0 | 3.8 | 3.75 | 3.6 | 3.6 | 3.65 |
| 20 | 3.9 | 4.0 | 4.1 | 4.3 | 3.9 | 3.9 | 4.0 | 3.8 | 3.75 | 3.6 | 3.6 | 3.6 |
| 21 | 3.9 | 4.0 | 4.1 | 4.3 | 3.9 | 3.9 | 3.9 | 3.8 | 3.75 | 3.55 | 3.6 | 3.6 |
| 22 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.5 | 3.9 | 3.8 | 3.75 | 3.55 | 3.6 | 3.6 |
| 23 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.3 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 24 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.2 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 25 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.1 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 26 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.1 | 3.9 | 3.8 | 3.7 | 3.6 | 3.6 | 3.6 |
| 27 | 3.9 | 4.0 | 4.0 | 4.2 | 3.9 | 4.45 | 3.9 | 3.8 | 3.7 | 3.6 | 3.6 | 3.6 |
| 28 | 3.9 | 4.0 | 4.0 | 4.1 | 3.9 | 4.9 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 29 | 3.9 | 4.0 | 4.0 | 4.1 | ....... | 4.6 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 30 | 3.9 | 4.0 | 4.0 | 4.1 | ....... | 4.5 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 31 | 3.9 | ....... | 4.0 | 4.0 | ....... | 4.5 | ....... | 3.8 | ....... | 3.55 | 3.6 | ....... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 3.6 | 3.6 | 3.7 | 3.7 | 5.6 | 6.45 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 2 | 3.6 | 3.6 | 3.7 | 3.7 | ....... | 6.6 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 3 | 3.6 | 3.6 | 3.7 | 3.7 | ....... | 5.6 | 2.9 | 3.1 | 3.0 | 2.9 | 2.85 | 2.7 |
| 4 | 3.6 | 3.65 | 3.7 | 3.7 | 6.5 | 6.9 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 5 | 3.6 | 3.7 | 3.7 | 3.7 | 5.8 | 7.05 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 6 | 3.6 | 3.7 | 3.7 | 3.7 | 5.5 | 7.05 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 7 | 3.6 | 3.7 | 3.7 | 3.7 | 5.1 | 9.65 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 8 | 3.6 | 3.7 | 3.7 | 3.7 | 4.9 | 9.05 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 9 | 3.6 | 3.7 | 3.7 | 3.7 | 4.9 | 9.95 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 10 | 3.6 | 3.7 | 3.7 | 3.9 | 4.9 | 7.0 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 11 | 3.6 | 3.7 | 3.7 | 4.4 | 5.3 | 5.0 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 12 | 3.6 | 3.7 | 3.7 | 4.3 | 5.2 | 4.2 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 13 | 3.65 | 3.7 | 3.7 | 4.3 | 5.0 | 3.4 | 2.9 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 |
| 14 | 3.65 | 3.7 | 3.7 | 4.3 | 5.2 | 3.2 | 2.9 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 |
| 15 | 3.65 | 3.7 | 3.7 | 4.4 | 5.0 | 3.2 | 2.9 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 |
| 16 | 3.65 | 3.7 | 3.7 | 4.5 | 4.9 | 2.9 | 2.9 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 |
| 17 | 3.6 | 3.7 | 3.7 | 4.2 | 4.8 | 2.7 | 3.0 | 3.0 | 3.0 | 2.9 | 2.75 | 2.7 |
| 18 | 3.6 | 3.7 | 3.7 | 4.0 | 4.8 | 2.7 | 3.0 | 3.0 | 3.0 | 2.9 | 2.75 | 2.7 |
| 19 | 3.6 | 3.7 | 3.7 | 3.9 | 4.8 | 2.8 | 3.0 | 3.0 | 3.0 | 2.85 | 2.75 | 2.7 |
| 20 | 3.6 | 3.7 | 3.8 | 3.9 | 4.9 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.75 | 2.7 |
| 21 | 3.6 | 3.7 | 3.75 | 3.9 | 4.9 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.75 | 2.7 |
| 22 | 3.6 | 3.7 | 3.75 | 3.9 | 4.9 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.75 | 2.7 |
| 23 | 3.6 | 3.7 | 3.75 | 3.8 | 4.9 | 2.7 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 24 | 3.6 | 3.7 | 3.7 | 3.8 | 4.9 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 25 | 3.6 | 3.7 | 3.7 | 4.5 | 4.9 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 26 | 3.6 | 3.7 | 3.7 | 4.8 | 4.8 | 2.7 | 3.1 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 27 | 3.6 | 3.7 | 3.7 | 4.5 | 4.8 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 28 | 3.65 | 3.7 | 3.7 | 4.7 | 5.0 | 2.7 | ....... | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 29 | 3.65 | 3.7 | 3.7 | 9.3 | ....... | 2.7 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 30 | 3.65 | 3.7 | 3.7 | 6.0 | ....... | 2.7 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 31 | 3.65 | ....... | 3.7 | 7.05 | ....... | 2.8 | ....... | 3.0 | ....... | 2.85 | 2.7 | ....... |

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] the Santa Barbara [illegible] engineer.

*Discharge measurements of Santa Ynez River near Lompoc, Cal., in 1906-1912.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* |
| 1906. | | | |
| Nov. 10 | R. S. Hawley | 5.02 | 10 |
| Dec. 12 | L. M. Hyde | 5.88 | 259 |
| 1907. | | | |
| Sept. 24 | Clapp and Hyde | 2.75 | 30 |
| 1908. | | | |
| Jan. 28 | L. M. Hyde | 4.80 | 3,480 |
| 29 | .....do | 3.85 | 1,490 |
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| 1909. | | | |
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| 23 | .....do | 4.15 | 1,850 |
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| 26 | .....do | 6.9 | 10,800 |
| 26 | .....do | 8.15 | 15,700 |
| 26 | .....do | 8.5 | 18,500 |
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| 1910. | | | |
| Jan. 30 | W. B. Clapp | 4.10 | 309 |
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| June 9 | J. E. Stewart | 3.79 | 40 |
| 9 | .....do | 3.79 | 42 |
| Aug. 4 | D. McDonald | 3.55 | 20 |
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| 1911. | | | |
| Feb. 27 | W. V. Hardy | 4.85 | 548 |
| Mar. 2 | Donald McDonald | 6.50 | 4,930 |
| 22 | .....do | 2.80 | 1,870 |
| Apr. 11 | .....do | 2.90 | 765 |
| May 10 | .....do | 3.00 | 389 |
| June 7 | .....do | 3.00 | 243 |
| July 11 | .....do | 2.90 | 127 |
| Aug. 19 | .....do | 2.75 | 55 |
| Sept. 8 | .....do | 2.70 | 47 |
| 8 | F. C. Ebert | 2.70 | 48 |
| Oct. 11 | Donald McDonald | 2.70 | 37 |
| Nov. 13 | .....do | 2.72 | 45 |
| Dec. 7 | .....do | 2.80 | 67 |
| 1912. | | | |
| Jan. 18 | Donald McDonald | 2.77 | 61 |
| Feb. 10 | .....do | 2.72 | 53 |
| 25 | .....do | 2.79 | 42 |
| 25 | F. C. Ebert | 2.79 | 43 |
| Mar. 6 | Donald McDonald | 3.26 | 199 |
| Apr. 13 | .....do | 3.30 | 407 |
| May 16 | .....do | 2.87 | 89 |
| June 7 | F. C. Ebert | 2.86 | 54 |
| 10 | Donald McDonald | 2.86 | 44 |

*Daily gage height, in feet, of Santa Ynez River near Lompoc, Cal., for 1906-1912.*

| Day. | Nov. | Dec. | Jan. | Sept. |
|---|---|---|---|---|
| 1906-7. | | | | |
| 1 | | 5.1 | 6.1 | |
| 2 | | 5.1 | 5.95 | |
| 3 | | 5.1 | 5.85 | |
| 4 | | 5.1 | 5.8 | |
| 5 | | 5.1 | 5.95 | |
| 6 | | 5.1 | 6.0 | |
| 7 | | 5.1 | 6.9 | |
| 8 | | 5.1 | 16.2 | |
| 9 | | 5.1 | 20.5 | |
| 10 | 5.0 | 5.1 | | |
| 11 | 5.0 | 5.3 | | |
| 12 | 5.0 | 6.2 | | |
| 13 | 5.0 | 6.2 | | |
| 14 | 5.0 | 5.85 | | |
| 15 | 5.0 | 5.65 | | |
| 16 | 5.0 | 5.5 | | |
| 17 | 5.0 | 5.45 | | |
| 18 | 5.0 | 5.35 | | |
| 19 | 5.0 | 5.35 | | |
| 20 | 5.0 | 5.35 | | |
| 21 | 5.0 | 5.3 | | |
| 22 | 5.0 | 5.3 | | |
| 23 | 5.0 | 5.3 | | |
| 24 | 5.0 | 5.3 | | |
| 25 | 5.05 | 5.3 | | 2.75 |
| 26 | 5.05 | 5.3 | | 2.75 |
| 27 | 5.1 | 5.6 | | 2.75 |
| 28 | 5.1 | 6.75 | | 2.75 |
| 29 | 5.1 | 6.4 | | 2.75 |
| 30 | 5.1 | 6.25 | | 2.75 |
| 31 | | 6.15 | | |

*Daily gage height, in feet, of Santa Ynez River near Lompoc, Cal., for 1906–1912*—Con.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 3.9 | 3.9 | 4.0 | 7.65 | 4.0 | 3.9 | 4.4 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 2 | 3.9 | 3.9 | 4.0 | 5.0 | 4.0 | 3.8 | 4.3 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 3 | 3.9 | 3.9 | 4.0 | 4.8 | 4.0 | 3.8 | 4.3 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 4 | 3.9 | 3.9 | 4.0 | 4.5 | 4.0 | 3.8 | 4.2 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 5 | 3.9 | 3.9 | 4.0 | 4.4 | 3.9 | 3.8 | 4.2 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 6 | 3.9 | 3.9 | 4.0 | 4.4 | 3.9 | 3.85 | 4.2 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 |
| 7 | 3.9 | 3.9 | 4.1 | 4.4 | 3.9 | 3.85 | 4.2 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 8 | 3.9 | 3.9 | 4.1 | 4.3 | 3.9 | 3.8 | 4.2 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 9 | 3.9 | 3.9 | 4.9 | 4.3 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 10 | 3.9 | 3.9 | 4.8 | 4.2 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 11 | 3.9 | 3.9 | 4.5 | 4.1 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 12 | 3.9 | 3.9 | 4.4 | 4.1 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 13 | 3.9 | 3.9 | 4.3 | 4.0 | 3.9 | 3.8 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 14 | 3.9 | 4.0 | 4.2 | 4.0 | 3.9 | 3.9 | 4.1 | 3.9 | 3.8 | 3.65 | 3.55 | 3.6 |
| 15 | 3.9 | 4.0 | 4.2 | 4.3 | 3.9 | 3.85 | 4.0 | 3.9 | 3.8 | 3.6 | 3.55 | 3.7 |
| 16 | 3.9 | 4.0 | 4.2 | 4.4 | 3.9 | 3.8 | 4.0 | 3.9 | 3.8 | 3.6 | 3.6 | 3.7 |
| 17 | 3.9 | 4.0 | 4.2 | 4.7 | 3.9 | 3.8 | 4.0 | 3.8 | 3.75 | 3.6 | 3.6 | 3.7 |
| 18 | 3.9 | 4.0 | 4.1 | 4.5 | 3.9 | 3.9 | 4.0 | 3.8 | 3.75 | 3.6 | 3.6 | 3.65 |
| 19 | 3.9 | 4.0 | 4.1 | 4.4 | 3.9 | 3.9 | 4.0 | 3.8 | 3.75 | 3.6 | 3.6 | 3.65 |
| 20 | 3.9 | 4.0 | 4.1 | 4.3 | 3.9 | 3.9 | 4.0 | 3.8 | 3.75 | 3.6 | 3.6 | 3.6 |
| 21 | 3.9 | 4.0 | 4.1 | 4.3 | 3.9 | 3.9 | 3.9 | 3.8 | 3.75 | 3.55 | 3.6 | 3.6 |
| 22 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.5 | 3.9 | 3.8 | 3.75 | 3.55 | 3.6 | 3.6 |
| 23 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.3 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 24 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.2 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 25 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.1 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 26 | 3.9 | 4.0 | 4.1 | 4.2 | 3.9 | 4.1 | 3.9 | 3.8 | 3.7 | 3.6 | 3.6 | 3.6 |
| 27 | 3.9 | 4.0 | 4.0 | 4.2 | 3.9 | 4.45 | 3.9 | 3.8 | 3.7 | 3.6 | 3.6 | 3.6 |
| 28 | 3.9 | 4.0 | 4.0 | 4.1 | 3.9 | 4.9 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 29 | 3.9 | 4.0 | 4.0 | 4.1 | ...... | 4.6 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 30 | 3.9 | 4.0 | 4.0 | 4.1 | ...... | 4.5 | 3.9 | 3.8 | 3.7 | 3.55 | 3.6 | 3.6 |
| 31 | 3.9 | ...... | 4.0 | 4.0 | ...... | 4.5 | ...... | 3.8 | ...... | 3.55 | 3.6 | ...... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 3.6 | 3.6 | 3.7 | 3.7 | 5.6 | 6.45 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 2 | 3.6 | 3.6 | 3.7 | 3.7 | ...... | 6.6 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 3 | 3.6 | 3.6 | 3.7 | 3.7 | ...... | 5.6 | 2.9 | 3.1 | 3.0 | 2.9 | 2.85 | 2.7 |
| 4 | 3.6 | 3.65 | 3.7 | 3.7 | 6.5 | 6.9 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 5 | 3.6 | 3.7 | 3.7 | 3.7 | 5.8 | 7.05 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 6 | 3.6 | 3.7 | 3.7 | 3.7 | 5.5 | 7.05 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 7 | 3.6 | 3.7 | 3.7 | 3.7 | 5.1 | 9.65 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 8 | 3.6 | 3.7 | 3.7 | 3.7 | 4.9 | 9.05 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 9 | 3.6 | 3.7 | 3.7 | 3.7 | 4.9 | 9.95 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 10 | 3.6 | 3.7 | 3.7 | 3.9 | 4.9 | 7.0 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 11 | 3.6 | 3.7 | 3.7 | 4.4 | 5.3 | 5.0 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 12 | 3.6 | 3.7 | 3.7 | 4.3 | 5.2 | 4.2 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 |
| 13 | 3.65 | 3.7 | 3.7 | 4.3 | 5.0 | 3.4 | 2.9 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 |
| 14 | 3.65 | 3.7 | 3.7 | 4.3 | 5.2 | 3.2 | 2.9 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 |
| 15 | 3.65 | 3.7 | 3.7 | 4.4 | 5.0 | 3.2 | 2.9 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 |
| 16 | 3.65 | 3.7 | 3.7 | 4.5 | 4.9 | 2.9 | 2.9 | 3.0 | 3.0 | 2.9 | 2.8 | 2.7 |
| 17 | 3.6 | 3.7 | 3.7 | 4.2 | 4.8 | 2.7 | 3.0 | 3.0 | 3.0 | 2.9 | 2.75 | 2.7 |
| 18 | 3.6 | 3.7 | 3.7 | 4.0 | 4.8 | 2.7 | 3.0 | 3.0 | 3.0 | 2.9 | 2.75 | 2.7 |
| 19 | 3.6 | 3.7 | 3.7 | 3.9 | 4.8 | 2.8 | 3.0 | 3.0 | 3.0 | 2.85 | 2.75 | 2.7 |
| 20 | 3.6 | 3.7 | 3.8 | 3.9 | 4.9 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.75 | 2.7 |
| 21 | 3.6 | 3.7 | 3.75 | 3.9 | 4.9 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.75 | 2.7 |
| 22 | 3.6 | 3.7 | 3.75 | 3.9 | 4.9 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.75 | 2.7 |
| 23 | 3.6 | 3.7 | 3.75 | 3.8 | 4.9 | 2.7 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 24 | 3.6 | 3.7 | 3.7 | 3.8 | 4.9 | 2.9 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 25 | 3.6 | 3.7 | 3.7 | 4.5 | 4.9 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 26 | 3.6 | 3.7 | 3.7 | 4.8 | 4.8 | 2.7 | 3.1 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 27 | 3.6 | 3.7 | 3.7 | 4.5 | 4.8 | 2.8 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 28 | 3.65 | 3.7 | 3.7 | 4.7 | 5.0 | 2.7 | ...... | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 29 | 3.65 | 3.7 | 3.7 | 9.3 | ...... | 2.7 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 30 | 3.65 | 3.7 | 3.7 | 6.0 | ...... | 2.7 | 3.0 | 3.0 | 2.9 | 2.85 | 2.7 | 2.7 |
| 31 | 3.65 | ...... | 3.7 | 7.05 | ...... | 2.8 | ...... | 3.0 | ...... | 2.85 | 2.7 | ...... |

[illegible]

*Daily discharge, in second-feet, of Santa Ynez River near Lompoc, Cal., for 1910–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | | | | | | |
| 1 | 11,100 | 225 | 150 | 550 | 95 | 52 | 30 | 20 | 22 |
| 2 | 1,580 | 225 | 90 | 385 | 95 | 51 | 30 | 20 | 22 |
| 3 | 1,200 | 225 | 90 | 380 | 95 | 49 | 30 | 20 | 22 |
| 4 | 750 | 225 | 90 | 275 | 95 | 48 | 30 | 20 | 22 |
| 5 | 620 | 150 | 90 | 275 | 95 | 47 | 30 | 20 | 22 |
| 6 | 620 | 150 | 120 | 275 | 95 | 46 | 30 | 20 | 22 |
| 7 | 620 | 150 | 120 | 275 | 95 | 44 | 26 | 00 | 22 |
| 8 | 500 | 150 | 90 | 275 | 95 | 43 | 26 | 20 | 22 |
| 9 | 500 | 150 | 90 | 197 | 95 | 42 | 26 | 20 | 22 |
| 10 | 400 | 150 | 90 | 197 | 95 | 42 | 26 | 20 | 23 |
| 11 | 310 | 150 | 90 | 197 | 95 | 42 | 26 | 20 | 22 |
| 12 | 310 | 150 | 90 | 197 | 95 | 42 | 26 | 20 | 22 |
| 13 | 225 | 150 | 90 | 197 | 95 | 42 | 26 | 20 | 22 |
| 14 | 225 | 150 | 150 | 197 | 95 | 42 | 26 | 20 | 22 |
| 15 | 500 | 150 | 120 | 138 | 95 | 42 | 22 | 20 | 30 |
| 16 | 620 | 150 | 90 | 138 | 95 | 42 | 22 | 22 | 30 |
| 17 | 1,040 | 150 | 90 | 138 | 58 | 36 | 22 | 22 | 30 |
| 18 | 750 | 150 | 150 | 138 | 58 | 36 | 22 | 22 | 26 |
| 19 | 620 | 150 | 150 | 138 | 58 | 36 | 22 | 22 | 26 |
| 20 | 500 | 150 | 150 | 138 | 58 | 36 | 22 | 22 | 22 |
| 21 | 500 | 150 | 150 | 95 | 58 | 36 | 20 | 22 | 22 |
| 22 | 400 | 150 | 740 | 95 | 58 | 36 | 20 | 22 | 22 |
| 23 | 400 | 150 | 480 | 95 | 58 | 30 | 20 | 22 | 22 |
| 24 | 400 | 150 | 375 | 95 | 58 | 30 | 20 | 22 | 22 |
| 25 | 400 | 150 | 275 | 95 | 58 | 30 | 20 | 22 | 22 |
| 26 | 400 | 150 | 270 | 95 | 58 | 30 | 22 | 22 | 22 |
| 27 | 400 | 150 | 615 | 95 | 58 | 30 | 22 | 22 | 22 |
| 28 | 310 | 150 | 1,260 | 95 | 57 | 30 | 20 | 22 | 22 |
| 29 | 310 | ........ | 785 | 95 | 56 | 30 | 20 | 22 | 22 |
| 30 | 310 | ........ | 640 | 95 | 54 | 30 | 20 | 22 | 22 |
| 31 | 225 | ........ | 625 | ........ | 53 | ........ | 20 | 22 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 1 | 22 | 22 | 30 | 30 | 2,070 | 4,750 | 1,400 | 520 | 274 | 127 | 97 | 45 |
| 2 | 22 | 22 | 30 | 30 | 790 | 5,290 | 1,340 | 500 | 269 | 127 | 97 | 45 |
| 3 | 22 | 22 | 30 | 30 | 230 | 2,070 | 1,270 | 590 | 264 | 127 | 97 | 46 |
| 4 | 22 | 26 | 30 | 30 | 4,930 | 6,430 | 1,210 | 470 | 258 | 127 | 97 | 46 |
| 5 | 22 | 30 | 30 | 30 | 2,610 | 7,030 | 1,150 | 460 | 253 | 127 | 97 | 47 |
| 6 | 22 | 30 | 30 | 30 | 1,830 | 7,030 | 1,090 | 440 | 248 | 127 | 97 | 47 |
| 7 | 22 | 30 | 30 | 30 | 970 | 19,000 | 1,020 | 430 | 243 | 127 | 97 | 48 |
| 8 | 22 | 30 | 30 | 30 | 620 | 16,100 | 960 | 420 | 243 | 127 | 97 | 48 |
| 9 | 22 | 30 | 30 | 30 | 620 | 20,400 | 900 | 400 | 243 | 127 | 97 | 48 |
| 10 | 22 | 30 | 30 | 64 | 620 | 15,000 | 830 | 389 | 243 | 127 | 97 | 47 |
| 11 | 22 | 30 | 30 | 335 | 1,380 | 9,000 | 765 | 384 | 243 | 127 | 97 | 47 |
| 12 | 22 | 30 | 30 | 260 | 1,170 | 6,000 | 745 | 379 | 243 | 127 | 97 | 47 |
| 13 | 26 | 30 | 30 | 260 | 790 | 3,800 | 725 | 373 | 243 | 127 | 67 | 46 |
| 14 | 26 | 30 | 30 | 260 | 1,170 | 3,300 | 700 | 368 | 243 | 127 | 67 | 46 |
| 15 | 26 | 30 | 30 | 335 | 790 | 3,200 | 680 | 363 | 243 | 127 | 67 | 46 |
| 16 | 26 | 30 | 30 | 430 | 620 | 2,500 | 660 | 358 | 243 | 127 | 67 | 45 |
| 17 | 22 | 30 | 30 | 195 | 470 | 2,000 | 820 | 353 | 243 | 127 | 55 | 45 |
| 18 | 22 | 30 | 30 | 97 | 470 | 1,900 | 800 | 347 | 243 | 127 | 55 | 45 |
| 19 | 22 | 30 | 30 | 64 | 470 | 2,100 | 770 | 342 | 243 | 97 | 55 | 44 |
| 20 | 22 | 30 | 42 | 64 | 620 | 2,000 | 750 | 337 | 127 | 97 | 56 | 44 |
| 21 | 22 | 30 | 36 | 64 | 620 | 1,900 | 730 | 332 | 127 | 97 | 56 | 44 |
| 22 | 22 | 30 | 36 | 64 | 620 | 1,870 | 710 | 327 | 127 | 97 | 57 | 43 |
| 23 | 22 | 30 | 36 | 42 | 620 | 1,600 | 690 | 321 | 127 | 97 | 40 | 43 |
| 24 | 22 | 30 | 30 | 42 | 620 | 1,900 | 660 | 316 | 127 | 97 | 40 | 43 |
| 25 | 22 | 30 | 30 | 430 | 620 | 1,630 | 640 | 311 | 127 | 97 | 41 | 42 |
| 26 | 22 | 30 | 30 | 810 | 470 | 1,370 | 800 | 306 | 127 | 97 | 41 | 42 |
| 27 | 22 | 30 | 30 | 430 | 470 | 1,500 | 600 | 300 | 127 | 97 | 42 | 42 |
| 28 | 26 | 30 | 30 | 670 | 790 | 1,270 | 580 | 295 | 127 | 97 | 42 | 41 |
| 29 | 26 | 30 | 30 | 17,300 | ........ | 1,210 | 550 | 290 | 127 | 97 | 43 | 41 |
| 30 | 26 | 30 | 30 | 3,210 | ........ | 1,150 | 530 | 284 | 127 | 97 | 44 | 41 |
| 31 | 26 | ........ | 30 | 7,030 | ........ | 1,270 | ........ | 279 | ........ | 97 | 44 | ........ |

[illegible] 1910–1912—

| | | | | | | May. | June. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible] square miles in earlier reports.

*Monthly discharge of Santa Ynez River near Lompoc, Cal., for 1906–1908 and 1910–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1908.** | | | | | | | |
| ctober | 18 | 18 | 18 | | | 1,110 | |
| ovember | 18 | 18 | 18 | | | 1,070 | |
| ecember | 197 | 18 | 38.5 | | | 2,370 | |
| **1910.** | | | | | | | |
| anuary | 11,100 | 225 | 872 | 1.20 | 1.38 | 53,600 | D. |
| ebruary | 225 | 150 | 161 | .222 | .23 | 8,940 | C. |
| arch | 1,260 | 90 | 271 | .374 | .43 | 16,700 | C. |
| pril | 550 | 95 | 188 | .260 | .29 | 11,200 | C. |
| ay | 95 | 53 | 76.7 | .106 | .12 | 4,720 | C. |
| une | 52 | 30 | 39.1 | .054 | .06 | 2,330 | C. |
| uly | 30 | 20 | 24.0 | .033 | .04 | 1,480 | C. |
| ugust | 22 | 20 | 21.0 | .029 | .03 | 1,290 | C. |
| eptember | 30 | 22 | 23.1 | .032 | .04 | 1,370 | C. |
| The period | | | | | | 102,000 | |
| **1910–11.** | | | | | | | |
| ctober | 26 | 22 | 23.0 | 0.032 | 0.04 | 1,410 | C. |
| ovember | 30 | 22 | 29.1 | .040 | .04 | 1,730 | C. |
| ecember | 42 | 30 | 31.0 | .043 | .05 | 1,910 | C. |
| anuary | 17,300 | 30 | 1,060 | 1.46 | 1.68 | 65,200 | C. |
| ebruary | 4,930 | 230 | 1,000 | 1.38 | 1.44 | 55,500 | B. |
| arch | 20,400 | 1,150 | 5,020 | 6.92 | 7.98 | 309,000 | C. |
| pril | 1,400 | 530 | 836 | 1.15 | 1.28 | 49,700 | D. |
| ay | 590 | 279 | 374 | .516 | .59 | 23,000 | D. |
| une | 274 | 127 | 204 | .281 | .31 | 12,100 | B. |
| uly | 127 | 97 | 114 | .157 | .18 | 7,010 | B. |
| ugust | 97 | 40 | 69.1 | .095 | .11 | 4,250 | C. |
| eptember | 48 | 41 | 44.8 | .062 | .07 | 2,670 | D. |
| The year | 20,400 | 22 | 734 | 1.01 | 13.77 | 533,000 | |
| **1911–12.** | | | | | | | |
| October | 40 | 37 | 37.6 | .052 | .06 | 2,310 | D. |
| November | 37 | 37 | 37.0 | .051 | .06 | 2,200 | D. |
| December | 67 | 37 | 61.2 | .084 | .10 | 3,760 | D. |
| January | 80 | 45 | 69.8 | .096 | .11 | 4,290 | C. |
| February | 45 | 22 | 41.4 | .057 | .06 | 2,380 | B. |
| March | 670 | 45 | 202 | .279 | .32 | 12,400 | B. |
| April | 540 | 70 | 162 | .223 | .25 | 9,640 | B. |
| May | 150 | 75 | 102 | .141 | .16 | 6,270 | C. |
| June | 70 | 30 | 48.7 | .067 | .07 | 2,900 | B. |
| The period | | | | | | 46,200 | |

NOTE.—Values, 1906–1908, are only approximate.

## MONO CREEK AT MONO DAM SITE, NEAR SANTA BARBARA, CAL.

This station was established November 22, 1902, and discontinued June 30, 1904. It was located about half a mile above the junction of Mono Creek and Santa Ynez River, 15 miles above the San Marcos ranch and 17 miles by trail from Santa Barbara. The river at this point traverses Mono Flat. The gage was an inclined timber, spiked to a willow tree on the right bank. The tree was blazed above the gage for use in recording flood stages above the gage rod. Discharge measurements were made by means of a cable and by wading. The cable was located about 500 feet below the dam site and was just above the gage. The channel is slightly curved for about 500 feet above and below the station. Both banks are high and are not

[illegible]

| | | | | | |
|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Mono Creek at Mono dam site, near Santa Barbara, Cal, for 1903–4.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903. | | | | | | | | 1904. | | | | | | | |
| 1 | 1.00 | 1.35 | 1.12 | 4.50 | 1.63 | 1.37 | ...... | 1 | ...... | ...... | ...... | 1.52 | 1.46 | (1.29) | ...... |
| 2 | 1.00 | 1.30 | 1.12 | 3.00 | 1.60 | 1.35 | ...... | 2 | ...... | ...... | ...... | (1.47) | (1.47) | 1.29 | ...... |
| 3 | 1.00 | 1.20 | 1.12 | 2.50 | 1.58 | 1.33 | ...... | 3 | ...... | ...... | ...... | 1.43 | (1.48) | 1.29 | ...... |
| 4 | 1.00 | 1.28 | 1.30 | 2.40 | 1.56 | 1.30 | ...... | 4 | ...... | ...... | ...... | 1.38 | 1.49 | (1.29) | ...... |
| 5 | 1.00 | 1.28 | 1.60 | 2.20 | 1.55 | 1.28 | | 5 | ...... | ...... | ...... | 1.38 | 1.43 | 1.29 | ...... |
| 6 | 1.00 | 1.21 | 1.37 | 2.00 | 1.52 | 1.28 | ...... | 6 | ...... | ...... | ...... | (1.38) | (1.37) | (1.29) | ...... |
| 7 | 1.00 | 1.25 | 1.35 | 1.90 | 1.50 | 1.28 | ...... | 7 | ...... | ...... | ...... | 1.37 | 1.32 | 1.29 | ...... |
| 8 | 1.00 | 1.35 | 1.30 | 1.85 | 1.50 | 1.35 | ...... | 8 | ...... | ...... | ...... | 1.35 | (1.32) | 1.28 | ...... |
| 9 | 1.00 | 1.29 | 1.30 | 1.80 | 1.50 | 1.40 | ...... | 9 | ...... | ...... | ...... | (1.35) | 1.32 | 1.25 | ...... |
| 10 | 1.00 | 1.28 | 1.25 | 1.77 | 1.50 | 1.45 | ...... | 10 | ...... | ...... | ...... | (1.35) | (1.32) | 1.28 | ...... |
| 11 | 1.00 | 1.27 | 1.22 | 1.73 | 1.48 | 1.40 | ...... | 11 | ...... | ...... | 1.90 | (1.35) | 1.32 | 1.28 | ...... |
| 12 | 1.00 | 1.26 | 1.22 | 1.70 | 1.48 | 1.35 | 0.80 | 12 | ...... | ...... | 1.48 | 1.35 | 1.39 | 1.26 | ...... |
| 13 | 1.00 | 1.25 | 1.22 | 1.68 | 1.48 | 1.33 | ...... | 13 | ...... | ...... | 1.35 | 1.35 | (1.38) | 1.26 | ...... |
| 14 | 1.00 | 1.20 | 1.27 | 1.65 | 1.47 | 1.32 | ...... | 14 | ...... | ...... | 1.33 | 1.35 | (1.38) | 1.25 | ...... |
| 15 | 1.00 | 1.20 | 1.25 | 1.63 | 1.45 | 1.30 | ...... | 15 | ...... | ...... | (1.33) | 1.35 | 1.37 | 1.25 | ...... |
| 16 | 1.00 | 1.20 | 1.30 | 2.20 | 1.45 | 1.30 | ...... | 16 | ...... | ...... | (1.32) | (1.35) | (1.37) | 1.25 | ...... |
| 17 | 1.00 | 1.20 | 1.32 | 2.40 | 1.43 | 1.30 | ...... | 17 | ...... | ...... | (1.31) | 1.36 | 1.36 | 1.25 | ...... |
| 18 | 1.00 | 1.20 | 1.26 | 2.30 | 1.43 | 1.29 | ...... | 18 | ...... | ...... | (1.30) | (1.36) | (1.36) | (1.25) | ...... |
| 19 | 1.00 | 1.20 | 1.25 | 2.35 | 1.43 | 1.26 | ...... | 19 | ...... | ...... | ...... | 1.95 | 1.34 | 1.25 | ...... |
| 20 | 1.00 | 1.19 | 1.24 | 2.10 | 1.42 | 1.22 | ...... | 20 | ...... | ...... | ...... | 1.77 | (1.34) | 1.25 | ...... |
| 21 | 1.00 | 1.19 | 1.24 | 2.00 | 1.42 | ...... | ...... | 21 | ...... | ...... | ...... | 1.64 | (1.35) | 1.25 | ...... |
| 22 | 1.00 | 1.18 | 1.23 | 1.90 | 1.42 | ...... | ...... | 22 | ...... | ...... | ...... | 1.58 | 1.35 | 1.25 | ...... |
| 23 | 1.00 | 1.17 | 1.23 | 1.85 | 1.42 | ...... | ...... | 23 | ...... | ...... | ...... | 1.52 | (1.34) | 1.25 | ...... |
| 24 | 1.00 | 1.15 | 1.30 | 1.80 | 1.42 | ...... | ...... | 24 | ...... | ...... | 2.21 | 1.45 | 1.33 | 1.25 | ...... |
| 25 | 1.00 | 1.15 | 2.50 | 1.75 | 1.41 | ...... | ...... | 25 | ...... | ...... | 1.71 | 1.42 | (1.34) | (1.25) | ...... |
| 26 | 1.00 | 1.15 | 1.90 | 1.75 | 1.41 | ...... | ...... | 26 | ...... | ...... | (1.60) | 1.63 | 1.35 | (1.24) | ...... |
| 27 | 1.00 | 1.14 | 1.70 | 1.70 | 1.40 | ...... | ...... | 27 | ...... | 3.05 | 1.52 | 1.63 | 1.34 | (1.23) | ...... |
| 28 | 2.95 | 1.14 | 1.60 | 1.70 | 1.40 | ...... | ...... | 28 | ...... | 1.89 | (1.50) | (1.63) | (1.33) | 1.22 | ...... |
| 29 | 1.55 | ...... | 1.61 | 1.67 | 1.40 | ...... | ...... | 29 | ...... | 1.41 | 1.48 | 1.62 | (1.32) | 1.21 | ...... |
| 30 | 1.30 | ...... | 2.65 | 1.65 | 1.40 | ...... | ...... | 30 | ...... | ...... | (1.50) | (1.60) | (1.31) | (1.21) | ...... |
| 31 | 1.25 | ...... | 2.80 | ...... | 1.38 | ...... | ...... | 31 | ...... | ...... | 1.52 | ...... | 1.30 | ...... | ...... |

NOTE.—No record June 21 to Nov. 1, 1903, or after July 1, 1904. Record kept on weir from Nov. 1, 1903, to Mar. 23, 1904, except Mar. 11–18, 1904. Constant discharge of 0.05 second-foot during November and December, 1903. Gage heights in parenthesis are estimated.

*Rating table for Mono Creek at Mono dam site, near Santa Barbara, Cal., from January 1 to June 30, 1904.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.10 | 0.0 | 1.50 | 6.6 | 1.90 | 31 | 2.60 | 162 |
| 1.15 | 0.2 | 1.55 | 8.6 | 1.95 | 35 | 2.70 | 188 |
| 1.20 | 0.5 | 1.60 | 11.2 | 2.00 | 40 | 2.80 | 214 |
| 1.25 | 1.0 | 1.65 | 13.8 | 2.10 | 54 | 2.90 | 242 |
| 1.30 | 1.5 | 1.70 | 16.8 | 2.20 | 73 | 3.00 | 270 |
| 1.35 | 2.4 | 1.75 | 20 | 2.30 | 93 | 3.10 | 300 |
| 1.40 | 3.5 | 1.80 | 23.5 | 2.40 | 114 | 3.20 | 330 |
| 1.45 | 5.0 | 1.85 | 27 | 2.50 | 137 | | |

*Monthly discharge of Mono Creek at Mono dam site, near Santa Barbara, Cal.*

[Drainage area, 119 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | [illegible] |
| **1903.** | | | | | | |
| January | 296 | 0.17 | 11 | 0.09 | 0.1[illegible] | [illegible] |
| February | 15 | 4 | 7 | .06 | .0[illegible] | [illegible] |
| March | 227 | 4 | 30 | .25 | .35 | [illegible] |
| April | 710 | 25 | 81 | .68 | .76 | [illegible] |
| May | 26 | 6 | 13 | .11 | .12 | [illegible] |
| June 1-20 | 11 | 2 | 5 | .04 | .03 | [illegible] |
| The period | | | | | | [illegible] |
| **1903-4.** | | | | | | |
| November | | | 0.05 | | | [illegible] |
| December | | | .06 | | | [illegible] |
| January | .07 | .04 | .04 | | | [illegible] |
| February | 285 | .03 | 11 | .09 | .10 | [illegible] |
| March | 76 | .06 | 6.2 | .05 | .06 | [illegible] |
| April | 25 | 2.4 | 7.1 | .06 | .07 | [illegible] |
| May | 6.3 | 1.5 | 2.8 | .02 | .02 | [illegible] |
| June | 1.4 | .6 | 1.1 | .01 | .01 | [illegible] |
| The period | | | | | | [illegible] |

NOTE.—Discharge for 1903 obtained by interpolating between discharge measurements.

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the Santa Ynez River basin:

*Miscellaneous measurements in Santa Ynez River drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-feet.* |
| Sept. 25, 1905 | Santa Ynez River | 2¾ miles above Lompoc | [illegible] |
| Apr. 19, 1906 | do | do | [illegible] |
| July 26, 1906 | do | do | [illegible] |
| Sept. 25, 1906 | do | do | [illegible] |
| Nov. 10, 1906 | do | 1¼ miles above Lompoc | [illegible] |
| Dec. 12, 1906 | do | do | [illegible] |
| Apr. 11, 1903 | Amagusa Creek | Mouth | [illegible] |
| 15, 1903 | do | do | [illegible] |
| 21, 1903 | do | do | [illegible] |
| 23, 1903 | do | do | [illegible] |
| 28, 1903 | do | do | [illegible] |
| 10, 1903 | Blue Canyon Creek | do | [illegible] |
| 22, 1903 | do | do | [illegible] |
| 29, 1903 | do | do | [illegible] |
| 10, 1903 | Trail Creek | do | 1.4 |
| 22, 1903 | do | do | [illegible] |
| 11, 1903 | Ruiz Creek | do | 5.4 |
| 15, 1903 | do | do | [illegible] |
| 21, 1903 | do | do | [illegible] |
| 23, 1903 | do | do | [illegible] |
| 28, 1903 | do | do | [illegible] |

## MISCELLANEOUS MEASUREMENTS OF STREAMS IN SANTA BARBARA COUNTY.

The following miscellaneous measurements have been made on streams in Santa Barbara County:

*Miscellaneous measurements of streams in Santa Barbara County.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Aug. —, 1889 | Aguilar Creek | G. F. Wright | | 0.12 |
| Do | Armas Creek | do | | .08 |
| Do | Armitas Creek | do | | .04 |
| Do | Arroyo Burro | do | | .23 |
| June 21, 1902 | do | J. B. Lippincott | 100 feet below Moore's north line. | .0036 |
| Aug. —, 1889 | Arroyo Carnero | G. F. Wright | | .08 |
| Do | Canada del Corral | do | | .15 |
| Do | Canada Lares | do | | .08 |
| Do | Canada Refugio | do | | .31 |
| Do | Canada Verde | do | | .08 |
| Do | Capitan (El) Creek | do | | .23 |
| Do | Carpinteria Creek | do | 1 mile above Placitas Road | .08 |
| June 16, 1900 | do | R. Moyer | do | .003 |
| Aug. 13, 1897 | Cold Spring Canyon Creek. | Montecito Water Co | Falls | .08 |
| Sept. 6, 1897 | do | do | do | .06 |
| Sept. 12, 1897 | do | do | do | .09 |
| Oct. 2, 1897 | do | do | do | .09 |
| Dec. 8, 1897 | do | do | do | .09 |
| Jan. 26, 1898 | do | do | do | .11 |
| June 10, 1900 | do | do | do | .00 |
| Mar. 22, 1896 | do | do | do | .00 |
| Aug. —, 1889 | do | G. F. Wright | | .23 |
| Mar. 22, 1896 | Cold Spring Canyon, City tunnel. | Montecito Water Co | | .06 |
| Aug. 13, 1897 | do | do | | .66 |
| Sept. 6, 1897 | do | do | | .31 |
| Sept. 12, 1897 | do | do | | .31 |
| Oct. 2, 1897 | do | do | | .28 |
| Dec. 8, 1897 | do | do | | .22 |
| Jan. 26, 1898 | do | do | | .22 |
| Apr. 19, 1898 | do | do | | .22 |
| June 10, 1900 | do | J. B. Lippincott | Portal | .41 |
| June 14, 1900 | do | R. Moyer | Station 29+97 | .02 |
| Do | do | do | do | .04 |
| Aug. —, 1889 | Dinsmoore Creek | G. F. Wright | | .23 |
| Do | Dos Pueblos Creek | do | | .54 |
| Do | Gobernador Creek | do | | .58 |
| Do | Maria Ygnacio Creek | do | | .23 |
| Jan. 15, 1888 | Mission Creek | A. Poett | 200 feet above dam | .93 |
| Jan. 24, 1888 | do | do | do | 2.80 |
| Feb. 7, 1888 | do | do | do | 1.37 |
| Mar. 16, 1888 | do | do | do | 2.23 |
| July 26, 1888 | do | do | do | .36 |
| July 13, 1889 | do | do | do | .43 |
| Aug. —, 1889 | do | G. F. Wright | do | .46 |
| Sept. 1, 1889 | do | A. Poett | do | .32 |
| June 11, 1892 | do | do | do | .36 |
| June 17 1900 | do | R. Moyer | do | .05 |
| Aug. —, 1889 | Padero Creek | G. F. Wright | | .31 |
| Do | Rincon Creek | do | | .12 |
| June 16, 1900 | do | R. Moyer | | .03 |
| Aug. —, 1889 | San Jose Creek | G. F. Wright | | .27 |
| Do | San Pedro Creek | do | | .08 |
| June 17, 1900 | San Roqui Creek | J. Harrington | Above tunnel | .03 |
| Do. | do | do | Below tunnel | .03 |
| May 2, 1900 | do | do | Station 6, opposite tunnel. | .04 |
| Do | do | do | Station 8, opposite tunnel. | .02 |
| Do | do | do | Tunnel of Pacific Improvement Co. | .08 |
| June 21, 1902 | do | J. B. Lippincott | do | .25 |
| Do | do | do | Below tunnel | .009 |
| Do | do | do | Station 44, opposite tunnel | .011 |
| Do | do | do | Station 65, opposite tunnel | .0063 |
| Nov. 2, 1899 | San Ysidro Creek | Greenheld | Above dam | .06 |
| Dec. 3, 1899 | do | do | do | .15 |
| Mar. 6, 1900 | do | do | do | 1.00 |
| Mar. 19, 1900 | do | do | do | .35 |

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible] MEASUREMENTS OF [illegible]

The following miscellaneous measurements were made [illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## SANTA CLARA RIVER BASIN.

### [illegible]

This station was established [illegible], and discontinued [illegible]. It was located near the ranch house on Durant's [illegible] miles above Santa Clara, [illegible], a station on the Pacific [illegible] railway.

The channel is slightly curved for [illegible] feet above and curved for [illegible] feet below the station. The water is swift at medium and flood stages.

The right bank is high and rocky and not liable to overflow. The left bank is low, covered with scattering poplar trees, but not liable to overflow. The bed of the stream is composed of sand and gravel. A portion of the bed is covered with a light growth of low brush. The channel is not liable to much change.

At low and medium stages, discharge measurements were made by wading. During high water, velocities were measured by means of floats. For this purpose two wires were stretched across the stream [illegible] feet apart. The rise in the channel above the upper wire was 0.[illegible] foot in 100 feet, and below the upper wire it was [illegible].57 foot in 100 feet.

The gage was an inclined staff, fastened to a rock ledge at the right bank.

*Discharge measurements of Santa Maria River near Santa Maria, Cal., in 1903–1906.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1903. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| Aug. 26 | W. B. Clapp | ........ | 1.0 | Feb. 2 | E. C. La Rue | 3.30 | 80 |
| Oct. 22 | .....do | 1.97 | .8 | Mar. 6 | O. W. Peterson | 2.70 | 47 |
| | | | | 21 | .....do | 1.20 | 67 |
| 1904. | | | | 1906. | | | |
| Feb. 18 | W. B. Clapp | 2.65 | 15.5 | Feb. 23 | R. S. Hawley | .90 | 17.9 |
| Mar. 12 | J. A. Thompson | 3.60 | a 220 | June 6 | .....do | b 2.20 | 11.9 |
| 24 | .....do | 4.00 | a 499 | Nov. 7 | .....do | 1.70 | 4.9 |

a Float measurements. b Zero of gage lowered 2 feet.

*Daily gage height, in feet, of Santa Maria River near Santa Maria, Cal., for 1903–1905.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1903–4. | | | | | | | | | |
| 1 | ........ | 1.97 | 1.97 | 2.30 | 2.38 | 2.60 | 2.63 | 2.20 | 1.80 |
| 2 | ........ | 1.97 | 1.97 | 2.30 | 2.38 | 2.57 | 2.60 | 2.20 | 1.80 |
| 3 | ........ | 1.97 | 1.97 | 2.30 | 2.38 | 2.55 | 2.45 | 2.20 | 1.80 |
| 4 | ........ | 1.97 | 1.98 | 2.30 | 2.38 | 2.50 | 2.30 | 2.18 | 1.80 |
| 5 | ........ | 1.97 | 2.00 | 2.30 | 2.50 | 2.45 | 2.27 | 2.15 | 1.80 |
| 6 | ........ | 1.97 | 2.05 | 2.30 | 2.50 | 2.40 | 2.20 | 2.15 | 1.80 |
| 7 | ........ | 1.97 | 2.07 | 2.30 | 2.50 | 2.38 | 2.15 | 2.15 | 1.80 |
| 8 | ........ | 1.97 | 2.10 | 2.30 | 2.50 | 2.36 | 2.11 | 2.15 | 1.80 |
| 9 | ........ | 1.97 | 2.10 | 2.30 | 2.45 | 2.35 | 2.05 | 2.10 | 1.80 |
| 10 | ........ | 1.97 | 2.10 | 2.30 | 2.43 | 2.35 | 2.05 | 2.05 | 1.80 |
| 11 | ........ | 1.97 | 2.13 | 2.30 | 2.41 | 2.70 | 2.05 | 2.00 | 1.80 |
| 12 | ........ | 1.97 | 2.15 | 2.30 | 2.41 | 3.60 | 2.05 | 2.00 | 1.80 |
| 13 | ........ | 1.97 | 2.16 | 2.30 | 2.50 | 3.00 | 2.05 | 2.00 | 1.80 |
| 14 | ........ | 1.97 | 2.18 | 2.30 | 2.40 | 3.40 | 2.05 | 1.90 | 1.80 |
| 15 | ........ | 1.97 | 2.19 | 2.30 | 2.48 | 2.80 | 2.05 | 1.90 | 1.80 |
| 16 | ........ | 1.97 | 2.20 | 2.30 | 3.10 | 2.65 | 2.05 | 1.87 | 1.80 |
| 17 | ........ | 1.97 | 2.20 | 2.30 | 2.70 | 2.60 | 2.05 | 1.85 | 1.80 |
| 18 | ........ | 1.97 | 2.21 | 2.40 | 2.65 | 2.50 | 2.05 | 1.80 | 1.80 |
| 19 | ........ | 1.97 | 2.21 | 2.40 | 2.60 | 2.40 | 2.20 | 1.80 | 1.80 |
| 20 | ........ | 1.97 | 2.21 | 2.40 | 2.58 | 2.50 | 2.40 | 1.85 | 1.80 |
| 21 | ........ | 1.97 | 2.22 | 2.40 | 2.50 | 2.45 | 2.30 | 1.85 | 1.80 |
| 22 | 1.97 | 1.97 | 2.22 | 2.40 | 2.50 | 2.43 | 2.30 | 1.85 | 1.80 |
| 23 | 1.97 | 1.97 | 2.22 | 2.39 | 2.48 | 3.00 | 2.20 | 1.85 | 1.80 |
| 24 | 1.97 | 1.97 | 2.23 | 2.38 | 2.45 | 2.80 | 2.20 | 1.85 | 1.80 |
| 25 | 1.97 | 1.97 | 2.24 | 2.38 | 2.40 | 3.00 | 2.20 | 1.85 | 1.80 |
| 26 | 1.97 | 1.97 | 2.26 | 2.38 | 2.40 | 2.70 | 2.30 | 1.85 | 1.80 |
| 27 | 1.97 | 1.97 | 2.27 | 2.38 | 2.40 | 2.75 | 2.40 | 1.82 | 1.80 |
| 28 | 1.97 | 1.97 | 2.27 | 2.38 | 2.80 | 2.60 | 2.35 | 1.80 | 1.80 |
| 29 | 1.97 | 1.97 | 2.28 | 2.38 | 2.60 | 2.90 | 2.20 | 1.80 | 1.80 |
| 30 | 1.97 | 1.97 | 2.28 | 2.38 | ........ | 2.70 | 2.20 | 1.80 | 1.80 |
| 31 | 1.97 | ........ | 2.29 | 2.38 | ........ | 2.60 | ........ | 1.80 | ........ |

*Daily gage height, in feet, of Santa Maria River near Santa Maria, Cal.*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

a Estimated.

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906. | | | | 1906. | | | | 1906. | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 21 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 22 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 23 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 24 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 25 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 26 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 27 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 28 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 29 | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | 20 | [illegible] | [illegible] | [illegible] | 30 | [illegible] | [illegible] | [illegible] |
| | | | | | | | | 31 | [illegible] | | [illegible] |

NOTE.—No record July 1 to Sept. 30, 1906.

*Rating tables for Santa Maria River near Santa Maria, Cal.*

**January 1 to December 31, 1904.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 1.75 | 0.0 | 2.20 | 3 | 2.90 | 40 | 3.60 | 220 |
| 1.80 | .2 | 2.30 | 5 | 3.00 | 53 | 3.70 | 265 |
| 1.85 | .3 | 2.40 | 7 | 3.10 | 70 | 3.80 | 325 |
| 1.90 | .5 | 2.50 | 10 | 3.20 | 90 | 3.90 | 400 |
| 1.95 | .7 | 2.60 | 13 | 3.30 | 115 | 4.00 | 500 |
| 2.00 | 1 | 2.70 | 18 | 3.40 | 140 | | |
| 2.10 | 2 | 2.80 | 27 | 3.50 | 175 | | |

**January 1 to February 2, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.00 | 1 | 2.60 | 13 | 3.20 | 67 | 3.70 | 178 |
| 2.10 | 2 | 2.70 | 18 | 3.30 | 82 | 3.80 | 213 |
| 2.20 | 3 | 2.80 | 25 | 3.40 | 100 | 3.90 | 250 |
| 2.30 | 5 | 2.90 | 33 | 3.50 | 122 | 4.00 | 290 |
| 2.40 | 7 | 3.00 | 43 | 3.60 | 148 | 4.10 | 330 |
| 2.50 | 10 | 3.10 | 54 | | | | |

**February 3 to March 12, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.70 | 1 | 2.70 | 48 | 3.70 | 285 | 4.70 | 915 |
| 1.80 | 2 | 2.80 | 59 | 3.80 | 335 | 4.80 | 990 |
| 1.90 | 3 | 2.90 | 72 | 3.90 | 385 | 4.90 | 1,065 |
| 2.00 | 5 | 3.00 | 87 | 4.00 | 440 | 5.00 | 1,140 |
| 2.10 | 8 | 3.10 | 105 | 4.10 | 500 | 5.20 | 1,290 |
| 2.20 | 12 | 3.20 | 125 | 4.20 | 565 | 5.40 | 1,440 |
| 2.30 | 17 | 3.30 | 147 | 4.30 | 630 | 5.60 | 1,595 |
| 2.40 | 23 | 3.40 | 173 | 4.40 | 700 | 5.80 | 1,755 |
| 2.50 | 30 | 3.50 | 205 | 4.50 | 770 | 6.00 | 1,915 |
| 2.60 | 38 | 3.60 | 242 | 4.60 | 840 | | |

**March 13 to December 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.50 | 1 | 2.00 | 250 | 4.00 | 1,070 | 7.00 | 3,260 |
| 0.60 | 3 | 2.10 | 280 | 4.20 | 1,185 | 7.20 | 3,450 |
| 0.70 | 6 | 2.20 | 310 | 4.40 | 1,305 | 7.40 | 3,650 |
| 0.80 | 10 | 2.30 | 340 | 4.60 | 1,435 | 7.60 | 3,870 |
| 0.90 | 18 | 2.40 | 375 | 4.80 | 1,565 | 7.80 | 4,100 |
| 1.00 | 31 | 2.50 | 410 | 5.00 | 1,700 | 8.00 | 4,350 |
| 1.10 | 47 | 2.60 | 445 | 5.20 | 1,840 | 8.20 | 4,640 |
| 1.20 | 65 | 2.70 | 480 | 5.40 | 1,980 | 8.40 | 4,970 |
| 1.30 | 84 | 2.80 | 520 | 5.60 | 2,130 | 8.60 | 5,340 |
| 1.40 | 105 | 2.90 | 560 | 5.80 | 2,280 | 8.80 | 5,750 |
| 1.50 | 127 | 3.00 | 600 | 6.00 | 2,430 | 9.00 | 6,200 |
| 1.60 | 150 | 3.20 | 690 | 6.20 | 2,585 | 10.00 | 10,000 |
| 1.70 | 175 | 3.40 | 780 | 6.40 | 2,745 | | |
| 1.80 | 200 | 3.60 | 875 | 6.60 | 2,910 | | |
| 1.90 | 225 | 3.80 | 975 | 6.80 | 3,080 | | |

NOTE.—The upper part of the rating curve is based on slope measurements.

*[illegible] of Santa Maria River near Santa Maria, [illegible]*

| Month. | Discharge in second-feet. | | | Total in acre-feet. |
| --- | --- | --- | --- | --- |
| | Maximum. | Minimum. | Mean. | |
| [illegible] | | | | |
| January | | | | |
| February | | | | |
| March | [illegible] | | [illegible] | [illegible] |
| [illegible] | | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | |
| October | [illegible] | | [illegible] | [illegible] |
| November | [illegible] | | | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | | [illegible] | [illegible] |
| March | [illegible] | | [illegible] | [illegible] |
| [illegible] | | [illegible] | [illegible] | [illegible] |
| [illegible] | | | [illegible] | |
| [illegible] | | | | [illegible] |
| [illegible] | | | [illegible] | [illegible] |
| September | | | | [illegible] |
| The year | [illegible] | | [illegible] | [illegible] |
| [illegible] | | | | |
| October | | | | [illegible] |
| November | [illegible] | | | [illegible] |
| December | [illegible] | [illegible] | [illegible] | |

NOTE.—[illegible] high-water values are only approximate.

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in Santa Maria River basin:

*Miscellaneous measurements in Santa Maria River drainage basin.*

| Date. | Stream. | Tributary to— | Locality. | Discharge. |
| --- | --- | --- | --- | --- |
| [illegible] | Sisquoc River | Santa Maria River | Sisquoc ranch | [illegible] |
| [illegible] | do | do | do | [illegible] |

## SALINAS RIVER BASIN.

### SALINAS RIVER NEAR SALINAS, CAL.

This station was established January 8, 1900. On account of the shifting nature of the channel during floods, four gage rods were set between January 8 and April 2, 1900, and each was referred to a different datum. On June 8, 1900, a permanent station was established at the county bridge 3½ miles south of Salinas.

The gage, which was a vertical staff, was attached to one of the piers of the bridge. The gage heights given in the following tables have been adjusted to the rod which was established June 8, 1900.

On account of the continual shifting of the stream bed, and the improbability of its water being used for either power or irrigation

purposes, the record on this stream was discontinued on August 3, 1901.

*Discharge measurements of Salinas River near Salinas, Cal., in 1900–1901.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1900. | | *Feet.* | *Sec.-ft.* | 1900. | | *Feet.* | *Sec.-ft.* |
| Apr. 9 | S. G. Bennett | 4.20 | 25.51 | Aug. 18 | D. A. Porter | 3.65 | 9.88 |
| 9 | D. A. Porter | 4.20 | 26.04 | Sept. 1 | do | 3.65 | 10.10 |
| 12 | do | 4.15 | 15.44 | 26 | S. G. Bennett | 3.45 | 1.7 |
| 15 | do | 4.10 | 13.10 | Oct. 23 | J. B. Lippincott | 3.45 | 1.7 |
| 19 | do | 4.10 | 17.04 | 26 | W. W. Cockins, jr. | ........ | 1.1 |
| 22 | do | 4.25 | 33.85 | Nov. 14 | do | 3.7 | 8.6 |
| 25 | do | 4.15 | 18.91 | 16 | do | 4.2 | 31.6 |
| May 1 | do | 4.10 | 18.02 | 19 | do | 6.7 | 2,056 |
| 4 | do | 4.10 | 16.40 | 20 | do | 5.9 | 829 |
| 7 | do | 4.10 | 17.50 | 21 | do | 5.6 | 743 |
| 12 | do | 4.10 | 17.85 | 22 | do | 15.6 | 33,600 |
| 16 | do | 4.10 | 17.94 | 23 | do | 9.7 | 12,851 |
| 19 | do | 4.10 | 16.23 | | | | |
| 24 | do | 4.1 | 17.20 | 1901. | | | |
| 29 | do | 4.1 | 17.43 | Jan. 15 | S. G. Bennett | 6.8 | 2,142 |
| June 2 | do | 4.05 | 13.32 | 22 | do | 5.8 | 1,338 |
| 5 | do | 4.05 | 15.29 | 24 | W. W. Cockins, jr. | 5.9 | 1,598 |
| 8 | do | 4.0 | 14.05 | Feb. 9 | S. G. Bennett | 7.9 | 4,982 |
| 12 | do | 4.05 | 15.79 | 19 | do | 6.05 | 1,561 |
| 15 | do | 4.05 | 15.32 | Mar. 17 | W. W. Cockins, jr. | 5.6 | 1,204 |
| 18 | do | 4.0 | 13.93 | 24 | do | 5.2 | 668 |
| 22 | do | 4.0 | 12.91 | 30 | do | 4.9 | 541 |
| 26 | do | 4.0 | 11.47 | Apr. 6 | do | 4.75 | 512 |
| 30 | do | 3.9 | 10.50 | 12 | do | 4.7 | 342 |
| July 3 | do | 3.65 | 9.96 | July 9 | do | 3.6 | 40 |
| 16 | do | 3.70 | 9.56 | Oct. 1 | do | ........ | 24 |
| Aug. 1 | do | 3.70 | 9.83 | | | | |

*Daily gage height, in feet, of Salinas River near Salinas, Cal., for 1900–1901.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1900. | | | | | | | | | |
| 1 | ........ | 5.1 | 4.4 | 4.2 | 4.1 | 4.05 | 3.8 | 3.7 | 3.6 |
| 2 | ........ | 5.1 | 4.3 | 4.2 | 4.1 | 4.05 | 3.7 | 3.7 | 3.7 |
| 3 | ........ | 5.0 | 4.3 | 4.3 | 4.1 | 4.05 | 3.65 | 3.6 | 3.6 |
| 4 | ........ | 4.9 | 4.5 | 4.2 | 4.1 | 4.05 | 3.6 | 3.6 | 3.7 |
| 5 | ........ | 4.9 | 4.6 | 4.2 | 4.1 | 4.05 | 3.6 | 3.6 | 3.6 |
| 6 | ........ | 5.0 | 4.6 | 4.2 | 4.05 | 4.05 | 3.6 | 3.7 | 3.7 |
| 7 | ........ | 5.0 | 4.5 | 4.2 | 4.05 | 4.05 | 3.6 | 3.7 | 3.6 |
| 8 | 7.1 | 4.9 | 4.5 | 4.2 | 4.05 | 4.05 | 3.7 | 3.7 | 3.7 |
| 9 | 6.9 | 4.9 | 5.1 | 4.2 | 4.05 | 4.05 | 3.7 | 3.7 | 3.6 |
| 10 | 6.7 | 4.9 | 5.0 | 4.2 | 4.05 | 4.05 | 3.8 | 3.7 | 3.7 |
| 11 | 6.5 | 4.9 | 5.0 | 4.1 | 4.05 | 4.05 | 3.8 | 3.7 | 3.6 |
| 12 | 6.3 | 4.9 | 5.0 | 4.1 | 4.05 | 4.05 | 3.6 | 3.7 | 3.7 |
| 13 | 6.1 | 4.8 | 4.9 | 4.1 | 4.05 | 4.05 | 3.6 | 3.7 | 3.7 |
| 14 | 6.0 | 4.8 | 4.9 | 4.1 | 4.05 | 4.05 | 3.7 | 3.7 | 3.6 |
| 15 | 5.9 | 4.7 | 4.9 | 4.1 | 4.05 | 4.05 | 3.7 | 3.7 | 3.7 |
| 16 | 5.7 | 4.7 | 4.8 | 4.1 | 4.05 | 4.0 | 3.7 | 3.7 | 3.6 |
| 17 | 5.7 | 4.7 | 4.7 | 4.1 | 4.05 | 4.0 | 3.7 | 3.6 | 3.7 |
| 18 | 5.6 | 4.6 | 4.6 | 4.1 | 4.05 | 4.0 | 3.7 | 3.7 | 3.6 |
| 19 | 5.5 | 4.7 | 4.6 | 4.1 | 4.05 | 4.0 | 3.7 | 3.7 | 3.7 |
| 20 | 5.5 | 4.7 | 4.5 | 4.1 | 4.05 | 4.0 | 3.7 | 3.6 | 3.6 |
| 21 | 5.4 | 4.6 | 4.4 | 4.2 | 4.05 | 4.0 | 3.7 | 3.7 | 3.6 |
| 22 | 5.4 | 4.5 | 4.4 | 4.2 | 4.05 | 4.0 | 3.7 | 3.6 | 3.5 |
| 23 | 5.3 | 4.4 | 4.4 | 4.2 | 4.05 | 4.0 | 3.7 | 3.7 | 3.5 |
| 24 | 5.3 | 4.4 | 4.4 | 4.1 | 4.05 | 4.0 | 3.7 | 3.6 | 3.5 |
| 25 | 5.3 | 4.4 | 4.3 | 4.1 | 4.05 | 4.0 | 3.7 | 3.7 | 3.5 |
| 26 | 5.2 | 4.4 | 4.3 | 4.1 | 4.05 | 4.0 | 3.7 | 3.6 | 3.4 |
| 27 | 5.2 | 4.4 | 4.3 | 4.1 | 4.05 | 4.0 | 3.7 | 3.7 | 3.5 |
| 28 | 5.2 | 4.4 | 4.3 | 4.1 | 4.05 | 4.0 | 3.7 | 3.6 | 3.4 |
| 29 | 5.2 | ........ | 4.2 | 4.1 | 4.05 | 3.9 | 3.6 | 3.7 | 3.4 |
| 30 | 5.2 | ........ | 4.2 | 4.1 | 4.05 | 3.9 | 3.7 | 3.6 | 3.4 |
| 31 | 5.1 | ........ | 4.2 | ........ | 4.05 | ........ | 3.7 | 3.7 | ........ |

*Daily gage height, in feet, of Salinas River near Salinas, Cal., for 1900–1901*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901. | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.65 | [illegible] | 4.15 | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.15 | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.1 | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .... |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ..... |
| 6 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .... |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 8 | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | . |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ... |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .. |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | 4.75 | [illegible] | [illegible] | ... |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | 4.7 | [illegible] | [illegible] | ... |
| 13 | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | 4.4 | 4.6 | [illegible] | [illegible] | ... |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | 4.5 | [illegible] | [illegible] | . |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | 4.55 | [illegible] | 3.45 | ..... |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | 4.55 | [illegible] | 3.45 | ... |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.45 | [illegible] | 3.45 | . |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.45 | [illegible] | 3.45 | .. |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.4 | [illegible] | 3.45 | ... |
| 20 | [illegible] | [illegible] | 4.9 | [illegible] | [illegible] | [illegible] | [illegible] | 4.3 | [illegible] | [illegible] | ..... |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.3 | 3.55 | [illegible] | |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.45 | |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.25 | [illegible] | [illegible] | |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.25 | [illegible] | [illegible] | . |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | 4.2 | [illegible] | [illegible] | .... |
| 26 | [illegible] | [illegible] | 4.7 | [illegible] | [illegible] | 4.95 | 4.2 | 4.2 | 3.55 | 3.45 | ... |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | [illegible] | 3.45 | . |
| 28 | [illegible] | [illegible] | 4.7 | [illegible] | [illegible] | [illegible] | [illegible] | 4.2 | [illegible] | 3.45 | |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | ....... | [illegible] | [illegible] | 4.2 | [illegible] | 3.45 | ... |
| 30 | [illegible] | [illegible] | 4.7 | [illegible] | ....... | [illegible] | [illegible] | 4.2 | [illegible] | 3.45 | .. |
| 31 | [illegible] | .... | 4.7 | [illegible] | ....... | [illegible] | ..... | 4.15 | ...... | 3.45 | .. |

*Rating tables for Salinas River near Salinas, Cal.*

**January 8 to December 31, 1900.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 7.50 | [illegible] |
| [illegible] | 10 | 4.50 | 105 | [illegible] | [illegible] | 8.00 | 4,750 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 8.50 | [illegible] |
| 4.20 | 25 | [illegible] | [illegible] | [illegible] | 1,725 | 9.00 | [illegible] |
| [illegible] | 40 | [illegible] | 455 | 7.00 | 2,500 | 9.50 | 11,000 |

**January 1 to August 3, 1901.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| [illegible] | [illegible] | [illegible] | [illegible] | 7.00 | 2,790 | 11.50 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 7.50 | 3,900 | 12.00 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 8.00 | [illegible] | 12.50 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 8.50 | [illegible] | 13.00 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 9.00 | [illegible] | 14.00 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 9.50 | [illegible] | 15.00 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 10.00 | 12,600 | 16.00 | 35,100 |
| [illegible] | [illegible] | [illegible] | 2,205 | 10.50 | 14,480 | | |
| 5.00 | 600 | 6.80 | 2,480 | 11.00 | 16,380 | | |

*Monthly discharge of Salinas River near Salinas, Cal., for 1900–1901.*

[Drainage area, 4,084 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| **1900.** | | | | | | |
| January 8-31 | 2,700 | 223 | 848 | 0.21 | 0.19 | 40,368 |
| February | 223 | 40 | 105 | .03 | .03 | 5,831 |
| March | 223 | 25 | 73 | .02 | .02 | 4,489 |
| April | 32 | 19 | 22 | .01 | .01 | 1,309 |
| May | 19 | 17 | 17 | .0 | .0 | 1,045 |
| June | 17 | 15 | 16 | .0 | .0 | 952 |
| July | 10 | 6 | 8 | .0 | .0 | 492 |
| August | 8 | 6 | 7 | .0 | .0 | 430 |
| September | 8 | 2 | 6 | .0 | .0 | 357 |
| The period | | | | | | 55,300 |
| **1900-1901.** | | | | | | |
| October | 4 | 1 | 2 | .0 | .0 | 123 |
| November | 33,600 | 0 | 2,413 | .59 | .66 | 143,583 |
| December | 1,050 | 82 | 296 | .07 | .08 | 18,139 |
| January | 35,162 | 380 | 4,921 | 1.21 | 1.39 | 302,580 |
| February | 20,927 | 540 | 4,172 | 1.02 | 1.06 | 231,701 |
| March | 1,772 | 420 | 1,063 | .26 | .30 | 65,361 |
| April | 405 | 160 | 270 | .07 | .07 | 16,066 |
| May | 2,012 | 160 | 533 | .13 | .15 | 32,773 |
| June | 160 | 30 | 56 | .01 | .01 | 3,332 |
| July | 30 | 25 | 27 | .01 | .01 | 1,660 |
| The period | | | | | | 815,000 |

## NACIMIENTO[1] CREEK NEAR BRYSON, CAL.

Nacimiento Creek drains the eastern slopes of the Santa Lucia Mountains and enters Salinas River 5 miles above Bradley. A gaging station was established on this stream at the Harris ranch, near Bryson, on February 17, 1901. The record on this stream was discontinued April 30, 1901. The total area drained above the gaging station is 171 square miles.

*Discharge measurements of Nacimiento Creek near Bryson, Cal.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1901. | | *Feet.* | *Sec.-feet.* |
| Feb. 17 | S. G. Bennett | 6.15 | 284 |
| Mar. 25 | W. W. Cockins, jr | 5.3 | 105 |
| Apr. 3 | ....do | 5.3 | 121 |

*Discharge measurements of Nacimiento Creek near Newhall ranch house, San Miguelito ranch, Monterey County, Cal.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1901. | | *Feet.* | *Sec.-feet.* |
| Jan. 18 | S. G. Bennett | 6.1 | 106 |
| Feb. 13 | ....do | 6.5 | 169 |
| June 3 | H. Hamlin | 4.82 | 33 |
| July 12 | ....do | 4.42 | 3.8 |

[1] Called Siena River on post route and Land Office maps.

[illegible]

[illegible]

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## [illegible]

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of San Antonio River near Jolon, Cal., for 1900–1901.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | Day. | Dec. | Jan. | Feb. | Mar. | Apr. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ........ | 3.4 | 4.4 | 5.0 | 4.2 | 16 | 3.7 | 4.3 | 4.7 | 4.5 | 4.1 |
| 2 | ........ | 3.4 | 4.4 | 5.0 | 4.2 | 17 | 3.9 | 4.3 | 4.7 | 4.5 | 4.1 |
| 3 | ........ | 3.3 | 4.4 | 4.9 | 4.2 | 18 | 3.9 | 4.3 | 4.7 | 4.5 | 4.1 |
| 4 | ........ | 7.2 | 4.6 | 4.9 | 4.2 | 19 | 3.7 | 4.3 | 4.9 | 4.5 | 4.1 |
| 5 | ........ | 7.4 | 5.8 | 4.8 | 4.2 | 20 | 3.7 | 4.5 | 5.6 | 4.4 | 4.0 |
| 6 | ........ | 7.6 | 6.4 | 4.8 | 4.2 | 21 | 3.7 | 4.9 | 5.8 | 4.4 | 4.0 |
| 7 | ........ | 6.6 | 5.8 | 4.7 | 4.2 | 22 | 3.7 | 5.4 | 5.5 | 4.4 | 4.0 |
| 8 | ........ | 4.4 | 5.4 | 4.6 | 4.2 | 23 | 3.7 | 5.0 | 5.4 | 4.3 | 4.0 |
| 9 | ........ | 4.3 | 5.3 | 4.6 | 4.2 | 24 | 3.7 | 4.8 | 5.2 | 4.3 | 4.0 |
| 10 | ........ | 4.2 | 5.2 | 4.6 | 4.2 | 25 | 3.7 | 4.6 | 5.0 | 4.3 | 4.0 |
| 11 | ........ | 4.2 | 5.0 | 4.6 | 4.2 | 26 | 3.6 | 4.6 | 5.1 | 4.3 | 4.0 |
| 12 | ........ | 4.3 | 4.9 | 4.6 | 4.2 | 27 | 3.6 | 4.5 | 5.1 | 4.3 | 4.0 |
| 13 | ........ | 4.3 | 4.9 | 4.6 | 4.1 | 28 | 3.6 | 4.5 | 5.1 | 4.3 | 4.3 |
| 14 | ........ | 4.3 | 4.8 | 4.5 | 4.1 | 29 | 3.7 | 4.5 | ........ | 4.3 | 4.7 |
| 15 | 3.7 | 4.3 | 4.8 | 4.5 | 4.1 | 30 | 3.5 | 4.5 | ........ | 4.3 | 5.5 |
| | | | | | | 31 | 3.5 | 4.4 | ........ | 4.3 | ........ |

*Daily discharge, in second-feet, of San Antonio River near Jolon, Cal., for 1901.*

| Day. | Jan. | Feb. | Mar. | Apr. | Day. | Jan. | Feb. | Mar. | Apr. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 150 | 110 | 400 | 64 | 16 | 84 | 230 | 142 | 50 |
| 2 | 150 | 110 | 400 | 64 | 17 | 84 | 230 | 142 | 50 |
| 3 | 130 | 110 | 340 | 64 | 18 | 84 | 230 | 142 | 50 |
| 4 | 2,940 | 183 | 340 | 64 | 19 | 84 | 340 | 142 | 50 |
| 5 | 3,300 | 1,010 | 280 | 64 | 20 | 142 | 820 | 110 | 39 |
| 6 | 3,700 | 1,700 | 280 | 64 | 21 | 340 | 1,010 | 110 | 39 |
| 7 | 1,980 | 1,010 | 230 | 64 | 22 | 670 | 740 | 110 | 39 |
| 8 | 110 | 670 | 183 | 64 | 23 | 400 | 670 | 84 | 39 |
| 9 | 84 | 600 | 183 | 64 | 24 | 280 | 530 | 84 | 39 |
| 10 | 64 | 530 | 183 | 64 | 25 | 183 | 400 | 84 | 39 |
| 11 | 64 | 400 | 183 | 64 | 26 | 183 | 460 | 84 | 39 |
| 12 | 84 | 340 | 183 | 64 | 27 | 142 | 460 | 84 | 39 |
| 13 | 84 | 340 | 183 | 50 | 28 | 142 | 460 | 84 | 84 |
| 14 | 84 | 280 | 142 | 50 | 29 | 142 | ........ | 84 | 230 |
| 15 | 84 | 280 | 142 | 50 | 30 | 142 | ........ | 84 | 740 |
| | | | | | 31 | 110 | ........ | 84 | ........ |

*Monthly discharge of San Antonio River near Jolon, Cal., for 1901.*

[Drainage area 161 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | |
|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. |
| January | 3,700 | 64 | 523 | 3.25 | 3.75 | 32,158 |
| February | 1,700 | 110 | 509 | 3.17 | 3.31 | 28,208 |
| March | 400 | 84 | 171 | 1.06 | 1.22 | 10,514 |
| April | 740 | 39 | 83 | .52 | .58 | 4,939 |

SAN LORENZO CREEK NEAR KING CITY, CAL.

San Lorenzo Creek drains the western slopes of the Gavilan Mountains and enters Salinas River near King City, Cal. There is a reservoir and dam site on the stream 5 miles above its mouth. This stream is entirely dry during the summer months. The flood waters are used for winter irrigation.

A gaging station was established December 16, 1900, at Hollenbeck's ranch. To obtain a reliable observer it was necessary to move the gaging station to the Mathews dam site one-half mile above the Hollenbeck ranch on November, 1901. The stream is very flashy, and the rating curve for 1902 was completed by taking the cross section and slope with a level and calculating the discharge by Kutter's formula. The station was discontinued May 31, 1903, and reestablished on September 12, 1911, in order to obtain estimates of the flood discharge.

*Discharge measurements of San Lorenzo Creek near King City, Cal., in 1901–1903.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1901. | | *Feet.* | *Sec.-ft.* | 1902. | | *Feet.* | *Sec.-ft.* |
| Jan. 22 | S. G. Bennett | 4.8 | 25 | Feb. 24 | S. G. Bennett | 1.00 | 6 |
| Feb. 14 | do | 5.5 | 71.2 | Apr. 30 | do | .90 | 2 |
| Mar. 27 | W. W. Cozzens, jr. | 4.3 | 12.6 | July 18 | H. Hamlin | | 1 |
| Apr. 1 | do | 4.2 | 5.1 | Nov. 12 | do | .85 | 6 |
| 15 | do | 4.2 | 2.2 | | | | |
| Nov. 2 | H. K. Green | .9 | 2.3 | 1903. | | | |
| | | | | June 1 | S. G. Bennett | .9 | 3.3 |
| 1902. | | | | Aug. 20 | H. Hamlin | .65 | .5 |
| Jan. 24 | S. G. Bennett | .9 | 5 | | | | |

*Daily gage height, in feet, of San Lorenzo Creek near King City, Cal., for 1900–1903.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901. | | | | | | | 1900–1901. | | | | | | |
| 1 | | 4.25 | 4.25 | 4.7 | 4.2 | 5.15 | 16 | 4.3 | 4.45 | 5.4 | 4.45 | 4.2 | |
| 2 | | 4.25 | 4.25 | 4.6 | 4.2 | | 17 | 4.25 | 4.45 | 5.3 | 4.5 | 4.2 | |
| 3 | | 4.25 | 4.25 | 4.6 | 4.35 | | 18 | 4.35 | 4.45 | 5.6 | 4.45 | 4.2 | |
| 4 | | 4.1 | 4.25 | 4.6 | 4.35 | | 19 | 4.35 | 4.5 | 5.7 | 4.45 | 4.2 | |
| 5 | | 7.8 | 12.0 | 4.6 | 4.4 | | 20 | 4.25 | 4.5 | 5.9 | 4.45 | 4.2 | |
| 6 | | 9.4 | 9.5 | 4.6 | 4.35 | | 21 | 4.25 | 4.7 | 6.05 | 4.45 | 4.2 | |
| 7 | | 7.15 | 9.5 | 4.6 | 4.2 | | 22 | 4.25 | 4.8 | 5.25 | 4.45 | 4.2 | |
| 8 | | 5.25 | 5.5 | 4.55 | 4.2 | | 23 | 4.25 | 4.6 | 5.15 | 4.45 | 4.2 | |
| 9 | | 4.55 | 5.5 | 4.5 | 4.2 | | 24 | 4.25 | 4.4 | 5.15 | 4.45 | 4.2 | |
| 10 | | 4.4 | 4.9 | 4.6 | 4.2 | | 25 | 4.25 | 4.3 | 5.1 | 4.45 | 4.2 | |
| 11 | | 4.4 | 4.7 | 4.6 | 4.2 | | 26 | 4.25 | 4.3 | 5.0 | 4.3 | 4.25 | |
| 12 | | 4.4 | 4.6 | 4.6 | 4.2 | | 27 | 4.25 | 4.35 | 5.0 | 4.25 | 4.3 | |
| 13 | | 4.4 | 5.0 | 4.6 | 4.2 | | 28 | 4.25 | 4.4 | 4.9 | 4.25 | 4.3 | |
| 14 | | 4.4 | 5.4 | 4.6 | 4.2 | | 29 | 4.25 | 4.25 | | 4.25 | 4.3 | |
| 15 | | 4.45 | 5.5 | 4.55 | 4.2 | | 30 | 4.25 | 4.25 | | 4.25 | 4.65 | |
| | | | | | | | 31 | 4.25 | 4.25 | | 4.3 | | |

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1901–2. | | | | | | | 1901–2. | | | | | | |
| 1 | | 1.2 | 0.9 | 0.9 | 1.1 | 0.9 | 16 | 1.0 | 1.05 | .9 | .9 | 1.0 | [illegible] |
| 2 | | 1.0 | .9 | .9 | 3.0 | .9 | 17 | 1.0 | 1.05 | .9 | .9 | 1.0 | [illegible] |
| 3 | | 1.0 | .9 | .9 | 2.2 | .9 | 18 | 1.0 | .95 | .9 | .9 | 1.0 | [illegible] |
| 4 | | 1.0 | .9 | .9 | 1.4 | .9 | 19 | 1.0 | .95 | .9 | .9 | 1.0 | [illegible] |
| 5 | | 1.0 | .9 | .9 | 1.2 | .9 | 20 | 1.0 | .95 | .9 | .9 | 1.0 | [illegible] |
| 6 | | 1.2 | .9 | .9 | 1.6 | .9 | 21 | 1.0 | .95 | .9 | .9 | .9 | [illegible] |
| 7 | | 1.1 | .9 | .9 | 1.6 | .9 | 22 | 1.0 | .9 | .9 | 1.7 | .9 | [illegible] |
| 8 | | 1.0 | .9 | .9 | 1.8 | .9 | 23 | 1.0 | .9 | .9 | 1.6 | .9 | [illegible] |
| 9 | | 1.0 | .9 | .9 | 1.8 | .9 | 24 | 1.0 | .9 | 1.0 | 1.7 | .9 | [illegible] |
| 10 | 1.3 | 1.05 | .9 | .9 | 1.6 | .9 | 25 | 1.0 | .9 | 1.0 | 2.9 | 1.0 | [illegible] |
| 11 | 1.3 | 1.05 | .9 | .9 | 1.2 | .9 | 26 | 1.0 | .9 | .9 | 2.3 | 1.0 | [illegible] |
| 12 | 1.3 | 1.05 | .9 | .9 | 1.2 | .9 | 27 | 1.0 | .9 | .9 | 1.5 | .9 | [illegible] |
| 13 | 1.3 | 1.05 | .9 | .9 | 1.1 | .9 | 28 | 1.2 | .9 | .9 | 1.2 | .9 | .9 |
| 14 | 1.0 | 1.05 | .9 | .9 | 1.0 | .9 | 29 | 2.75 | | .9 | | .9 | [illegible] |
| 15 | 1.0 | 1.05 | .9 | .9 | 1.0 | .9 | 30 | 1.35 | | .9 | | .9 | [illegible] |
| | | | | | | | 31 | | | .9 | | .9 | |

*Daily gage height, in feet, of San Lorenzo Creek near King City, Cal., for 1900-1903*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|
| 1902-3. | | | | | | | | |
| 1 | ........ | 1.0 | 1.0 | 0.9 | 1.8 | 0.9 | 2.4 | 0.9 |
| 2 | ........ | 1.0 | 1.0 | .9 | 1.6 | .9 | 2.4 | .9 |
| 3 | ........ | 1.0 | .9 | .9 | 1.5 | 1.0 | 2.0 | .9 |
| 4 | ........ | 1.0 | .9 | .9 | 1.4 | 1.0 | 1.8 | .9 |
| 5 | ........ | 1.0 | .9 | .9 | 1.2 | 1.0 | 1.8 | .9 |
| 6 | ........ | 1.0 | .9 | .9 | 1.2 | 1.0 | 1.6 | .9 |
| 7 | ........ | 1.0 | .9 | .9 | 1.2 | 1.0 | 1.2 | .9 |
| 8 | ........ | 1.0 | .9 | .9 | 1.8 | 1.0 | 1.2 | .9 |
| 9 | ........ | 1.0 | .9 | .9 | 1.6 | 1.0 | 1.2 | .9 |
| 10 | ........ | 1.0 | 1.0 | .9 | 1.6 | 1.0 | 1.1 | .9 |
| 11 | ........ | 1.8 | 1.0 | .9 | 1.4 | 1.0 | 1.1 | .9 |
| 12 | ........ | 1.7 | 1.0 | .9 | 1.2 | 1.0 | .9 | .9 |
| 13 | ........ | 1.6 | 1.0 | .9 | 1.0 | 1.0 | .9 | .9 |
| 14 | ........ | 1.6 | .9 | .9 | 1.0 | 1.0 | .9 | .9 |
| 15 | ........ | 1.6 | .9 | .9 | 1.0 | 1.8 | .9 | .9 |
| 16 | ........ | 1.6 | .9 | .9 | 1.0 | 1.6 | .9 | .9 |
| 17 | ........ | 1.6 | .9 | .9 | 1.0 | 1.4 | .9 | .9 |
| 18 | ........ | 1.5 | .9 | .9 | 1.0 | 1.8 | .9 | .9 |
| 19 | 0.9 | 1.8 | .9 | .9 | 1.0 | 1.6 | .9 | .8 |
| 20 | .9 | 1.7 | .9 | .9 | 1.0 | 1.2 | .9 | .8 |
| 21 | 1.0 | 1.6 | .9 | .9 | 1.0 | 1.0 | .9 | .8 |
| 22 | 1.0 | 1.6 | .9 | .9 | .9 | 1.0 | .9 | .8 |
| 23 | 1.0 | 1.4 | .9 | .9 | .9 | 1.0 | .9 | .8 |
| 24 | 1.0 | 1.4 | .9 | .9 | .9 | 1.0 | .9 | .8 |
| 25 | 1.0 | 1.4 | .9 | 1.0 | .9 | 1.6 | .9 | .8 |
| 26 | 1.0 | 1.4 | .9 | 1.0 | .9 | 1.8 | .9 | .8 |
| 27 | 1.0 | 1.4 | .9 | 1.2 | .9 | 1.6 | .9 | .8 |
| 28 | 1.0 | 1.4 | .9 | 1.9 | .9 | 2.0 | .9 | .8 |
| 29 | 1.0 | 1.2 | .9 | 1.8 | ........ | 2.0 | .9 | .8 |
| 30 | 1.0 | 1.2 | .9 | 1.6 | ........ | 1.8 | .9 | .8 |
| 31 | 1.0 | ........ | .9 | 2.0 | ........ | 2.4 | ........ | .8 |

*Rating tables for San Lorenzo Creek near King City, Cal.*

**January 1 to May 1, 1901.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 4.00 | 0 | 6.00 | 240 | 8.00 | 1,820 | 10.00 | 4,800 |
| 4.20 | 6 | 6.20 | 350 | 8.20 | 2,052 | 10.20 | 5,160 |
| 4.40 | 13 | 6.40 | 460 | 8.40 | 2,284 | 10.40 | 5,520 |
| 4.60 | 22 | 6.60 | 600 | 8.60 | 2,540 | 10.60 | 5,920 |
| 4.80 | 32 | 6.80 | 720 | 8.80 | 2,820 | 10.80 | 6,360 |
| 5.00 | 46 | 7.00 | 870 | 9.00 | 3,100 | 11.00 | 6,800 |
| 5.20 | 62 | 7.20 | 1,040 | 9.20 | 3,420 | 11.50 | 7,900 |
| 5.40 | 80 | 7.40 | 1,200 | 9.40 | 3,740 | 12.00 | 9,200 |
| 5.60 | 125 | 7.60 | 1,400 | 9.60 | 4,080 | 12.50 | 10,600 |
| 5.80 | 175 | 7.80 | 1,610 | 9.80 | 4,440 | | |

**November 10, 1901, to May 31, 1903.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 0.80 | 3 | 1.40 | 88 | 2.00 | 274 | 2.60 | 585 |
| .90 | 5 | 1.50 | 110 | 2.10 | 317 | 2.70 | 650 |
| 1.00 | 15 | 1.60 | 135 | 2.20 | 364 | 2.80 | 720 |
| 1.10 | 32 | 1.70 | 166 | 2.30 | 415 | 2.90 | 795 |
| 1.20 | 50 | 1.80 | 200 | 2.40 | 470 | 3.00 | 875 |
| 1.30 | 68 | 1.90 | 236 | 2.50 | 525 | | |

*Discharge measurements of Arroyo Seco near Soledad, Cal., in 1905–1912.*

[By [illegible] and others.]

| Date. | Gage height. | Discharge. |
|---|---|---|
| 1905. | *Feet.* | *Sec.-ft.* |
| [illegible] | [illegible] | [illegible] |
| Aug. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| Nov. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| Dec. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| June [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| July [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| Aug. [illegible] | [illegible] | [illegible] |
| 1906. | | |
| Feb. [illegible] | [illegible] | [illegible] |
| Mar. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| May [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| June [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| July [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| Aug. [illegible] | [illegible] | [illegible] |
| Sept. [illegible] | [illegible] | [illegible] |
| Oct. [illegible] | [illegible] | [illegible] |
| Dec. 31 | 7.30 | [illegible] |

| Date. | Gage height. | Discharge. |
|---|---|---|
| 1907. | *Feet.* | *Sec.-ft.* |
| Jan. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 467 |
| [illegible] | [illegible] | [illegible] |
| Mar. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 415 |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 4,130 |
| Apr. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| June [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 51 |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| 1908. | | |
| Jan. [illegible] | 4.82 | [illegible] |
| [illegible] | [illegible] | 1,130 |
| [illegible] | [illegible] | [illegible] |
| Feb. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| Mar. [illegible] | [illegible] | [illegible] |
| July [illegible] | 4.75 | 3.6 |
| [illegible] | 4.40 | 3.2 |
| 1909. | | |
| Jan. [illegible] | 10.00 | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | 10.30 | [illegible] |
| [illegible] | [illegible] | [illegible] |
| Feb. [illegible] | [illegible] | [illegible] |
| Apr. [illegible] | [illegible] | 344 |
| May [illegible] | [illegible] | [illegible] |
| June [illegible] | [illegible] | [illegible] |
| Nov. [illegible] | [illegible] | [illegible] |
| Dec. [illegible] | 6.32 | [illegible] |
| 1910. | | |
| Jan. 5 | [illegible] | [illegible] |
| 10 | 6.30 | 247 |
| Feb. 11 | [illegible] | 137 |
| 17 | [illegible] | 105 |
| [illegible] | 5.75 | [illegible] |
| Mar. [illegible] | 5.70 | [illegible] |
| 15 | [illegible] | [illegible] |
| 20 | [illegible] | 1,300 |
| [illegible] | 7.30 | [illegible] |
| Apr. 3 | 6.33 | 331 |
| 11 | 6.10 | 219 |
| 18 | 5.98 | 134 |
| 26 | 5.75 | 115 |
| May 4 | 5.70 | 96 |
| 8 | 5.65 | 96 |
| 15 | 5.55 | 58 |

| Date. | Gage height. | Discharge. |
|---|---|---|
| 1910. | *Feet.* | *Sec.-ft.* |
| May [illegible] | [illegible] | [illegible] |
| 10 | 5.46 | 4 |
| June [illegible] | 5.42 | 3 |
| 13 | 5.38 | [illegible] |
| [illegible] | [illegible] | 5 |
| 26 | [illegible] | [illegible] |
| July [illegible] | [illegible] | 3 |
| 10 | [illegible] | 4 |
| [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| [illegible] | 5.05 | [illegible] |
| Aug. 21 | [illegible] | [illegible] |
| Sept. 1 | [illegible] | [illegible] |
| [illegible] | 5.12 | [illegible] |
| Oct. 1 | [illegible] | [illegible] |
| Dec. 1 | 5.35 | [illegible] |
| 1911. | | |
| Jan. 11 | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] |
| Feb. 14 | 7.12 | [illegible] |
| Mar. [illegible] | 7.08 | [illegible] |
| 13 | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] |
| Apr. [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 355 |
| 30 | [illegible] | [illegible] |
| May 14 | [illegible] | [illegible] |
| [illegible] | 4.40 | [illegible] |
| June 10 | 4.25 | [illegible] |
| July [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | [illegible] |
| Aug. [illegible] | 3.75 | [illegible] |
| 25 | 4.12 | [illegible] |
| [illegible] | [illegible] | [illegible] |
| Sept. 13 | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] |
| 24 | 3.75 | [illegible] |
| Oct. [illegible] | 3.75 | [illegible] |
| 30 | 3.73 | [illegible] |
| Nov. 5 | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] |
| Dec. 3 | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] |
| 21 | 4.05 | [illegible] |
| 1912. | | |
| Jan. 21 | 4.10 | [illegible] |
| 28 | 4.35 | [illegible] |
| Feb. 11 | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] |
| Mar. [illegible] | 6.02 | [illegible] |
| 13 | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] |
| Apr. 10 | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] |
| May 5 | [illegible] | [illegible] |
| 28 | 5.12 | [illegible] |
| June 2 | 4.15 | [illegible] |
| 16 | 3.96 | [illegible] |
| 23 | [illegible] | [illegible] |
| July 7 | 3.75 | [illegible] |

*Daily gage height, in feet, of Arroyo Seco at Foster's ranch, near Piney, Cal., for 1901.*

| Day. | Jan. | Feb. | Mar. | Apr. | Day. | Jan. | Feb. | Mar. | Apr. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.0 | 3.2 | 3.8 | 3.0 | 16 | 3.5 | 3.6 | 3.3 | 2.8 |
| 2 | 3.0 | 3.2 | 3.8 | 3.0 | 17 | 3.5 | 3.6 | 3.3 | 2.8 |
| 3 | 3.0 | 3.2 | 3.7 | 3.0 | 18 | 3.4 | 3.6 | 3.3 | 2.8 |
| 4 | 6.3 | 3.3 | 3.7 | 3.0 | 19 | 3.3 | 4.5 | 3.2 | 2.8 |
| 5 | 6.1 | 5.8 | 3.6 | 3.0 | 20 | 3.4 | 5.5 | 3.1 | 2.8 |
| 6 | 7.0 | 5.4 | 3.6 | 3.0 | 21 | 4.2 | 5.0 | 3.1 | 2.8 |
| 7 | 6.0 | 3.8 | 3.5 | 3.0 | 22 | 3.8 | 4.7 | 3.1 | 2.8 |
| 8 | 5.0 | 3.5 | 3.6 | 2.9 | 23 | 3.7 | 4.7 | 3.1 | 2.8 |
| 9 | 4.5 | 4.0 | 3.5 | 2.9 | 24 | 3.6 | 4.5 | 3.1 | 2.8 |
| 10 | 4.2 | 4.0 | 3.4 | 2.9 | 25 | 3.5 | 4.3 | 3.1 | 2.8 |
| 11 | 4.0 | 3.6 | 3.4 | 2.8 | 26 | 3.5 | 4.1 | 3.1 | 2.8 |
| 12 | 3.9 | 3.7 | 3.4 | 2.9 | 27 | 3.5 | 4.0 | 3.0 | 2.8 |
| 13 | 3.8 | 3.7 | 3.4 | 2.8 | 28 | 3.4 | 4.0 | 3.0 | 2.8 |
| 14 | 3.6 | 3.6 | 3.4 | 2.8 | 29 | 3.3 | ....... | 3.0 | 3.8 |
| 15 | 3.6 | 3.6 | 3.3 | 2.8 | 30 | 3.2 | ....... | 3.0 | 5.5 |
| | | | | | 31 | 3.2 | ....... | 3.0 | ....... |

*Daily gage height, in feet, of Arroyo Seco near Soledad, Cal., for 1901-1912.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1901-2.** | | | | | | | | | | | | |
| 1 | ....... | ....... | 5.5 | 5.3 | 5.3 | 7.5 | 5.9 | 5.7 | 5.5 | 5.2 | 5.0 | 4.9 |
| 2 | ....... | ....... | 5.4 | 5.3 | 5.3 | 8.7 | 6.0 | 5.7 | 5.4 | 5.2 | 5.0 | 4.9 |
| 3 | ....... | ....... | 5.4 | 5.3 | 5.3 | 7.8 | 5.9 | 5.7 | 5.5 | 5.2 | 5.0 | 4.8 |
| 4 | ....... | ....... | 5.4 | 5.3 | 5.3 | 7.2 | 5.8 | 5.7 | 5.4 | 5.2 | 4.9 | 4.9 |
| 5 | ....... | ....... | 5.4 | 5.3 | 5.3 | 6.9 | 5.8 | 5.7 | 5.4 | 5.2 | 5.0 | 4.8 |
| 6 | ....... | 5.2 | 5.4 | 5.3 | 5.3 | 7.1 | 5.8 | 5.7 | 5.4 | 5.2 | 4.9 | 4.9 |
| 7 | ....... | 5.15 | 5.4 | 5.3 | 5.3 | 6.9 | 8.1 | 5.7 | 5.4 | 5.2 | 4.9 | 4.8 |
| 8 | ....... | 5.1 | 5.4 | 5.3 | 5.3 | 8.3 | 6.7 | 5.6 | 5.4 | 5.2 | 4.9 | 4.8 |
| 9 | ....... | 5.1 | 5.4 | 5.3 | 5.7 | 7.9 | 6.4 | 5.7 | 5.4 | 5.2 | 4.9 | 4.8 |
| 10 | ....... | 5.2 | 5.4 | 5.3 | 5.5 | 7.3 | 6.3 | 5.6 | 5.4 | 5.2 | 4.9 | 4.8 |
| 11 | ....... | 5.73 | 5.3 | 5.3 | 5.5 | 7.1 | 6.2 | 5.6 | 5.4 | 5.2 | 4.9 | 4.8 |
| 12 | ....... | 5.3 | 5.3 | 5.3 | 5.6 | 6.8 | 6.2 | 5.6 | 5.4 | 5.2 | 4.9 | 4.8 |
| 13 | ....... | 5.3 | 5.3 | 5.3 | 5.5 | 6.8 | 6.1 | 5.6 | 5.4 | 5.2 | 4.9 | 4.8 |
| 14 | ....... | 5.3 | 5.3 | 5.3 | 5.5 | 6.5 | 6.0 | 5.6 | 5.4 | 5.1 | 4.9 | 4.8 |
| 15 | ....... | 5.25 | 5.3 | 5.3 | 6.4 | 6.4 | 6.0 | 5.6 | 5.4 | 5.1 | 4.9 | 4.8 |
| 16 | ....... | 5.25 | 5.3 | 5.3 | 6.0 | 6.3 | 6.0 | 5.6 | 5.3 | 5.1 | 4.9 | 4.8 |
| 17 | ....... | 5.3 | 5.3 | 5.3 | 6.0 | 6.3 | 6.0 | 5.6 | 5.3 | 5.1 | 4.9 | 4.8 |
| 18 | ....... | 5.3 | 5.3 | 5.3 | 5.9 | 6.2 | 5.9 | 5.6 | 5.3 | 5.1 | 4.9 | 4.8 |
| 19 | ....... | 5.2 | 5.3 | 5.3 | 5.9 | 6.2 | 5.9 | 5.5 | 5.3 | 5.1 | 4.9 | 4.8 |
| 20 | ....... | 5.2 | 5.3 | 5.4 | 5.7 | 6.2 | 5.9 | 5.5 | 5.3 | 5.1 | 4.9 | 4.8 |
| 21 | ....... | 5.2 | 5.3 | 5.3 | 7.4 | 6.1 | 5.9 | 5.5 | 5.3 | 5.1 | 4.9 | 4.8 |
| 22 | ....... | 5.2 | 5.3 | 5.3 | 8.8 | 6.0 | 5.9 | 5.5 | 5.3 | 5.1 | 4.9 | 4.8 |
| 23 | ....... | 5.2 | 5.3 | 5.3 | 6.3 | 6.0 | 5.8 | 5.5 | 5.3 | 5.0 | 4.9 | 4.8 |
| 24 | ....... | 5.2 | 5.3 | 5.3 | 8.7 | 6.1 | 6.0 | 5.5 | 5.3 | 5.0 | 4.9 | 4.8 |
| 25 | ....... | 5.2 | 5.3 | 5.4 | 9.1 | 6.0 | 5.9 | 5.5 | 5.3 | 5.0 | 4.9 | 4.8 |
| 26 | ....... | 5.2 | 5.3 | 5.4 | 9.1 | 6.1 | 5.9 | 5.5 | 5.2 | 5.0 | 4.9 | 4.8 |
| 27 | ....... | 5.2 | 5.3 | 5.4 | 8.2 | 6.0 | 5.8 | 5.5 | 5.2 | 5.0 | 4.9 | 4.8 |
| 28 | ....... | 5.6 | 5.3 | 5.4 | 7.8 | 5.9 | 5.8 | 5.5 | 5.2 | 5.0 | 4.9 | 4.8 |
| 29 | ....... | 5.6 | 5.3 | 5.4 | ....... | 5.9 | 5.8 | 5.5 | 5.2 | 5.0 | 4.9 | 4.8 |
| 30 | ....... | 5.6 | 5.3 | 5.3 | ....... | 5.9 | 5.8 | 5.5 | 5.2 | 5.0 | 4.9 | 4.8 |
| 31 | ....... | ....... | 5.3 | 5.3 | ....... | 5.9 | ....... | 5.5 | ....... | 5.0 | 4.9 | ....... |
| **1902-3.** | | | | | | | | | | | | |
| 1 | 4.8 | 5.2 | 5.3 | 5.4 | 7.4 | 5.8 | 9.9 | 5.9 | 5.6 | 5.4 | 5.2 | 5.1 |
| 2 | 4.8 | 5.2 | 5.3 | 5.4 | 6.9 | 5.8 | 8.4 | 5.9 | 5.6 | 5.4 | 5.3 | 5.1 |
| 3 | 4.8 | 5.2 | 5.3 | 5.4 | 6.6 | 5.8 | 8.2 | 5.9 | 5.6 | 5.4 | 5.2 | 5.1 |
| 4 | 4.8 | 5.2 | 5.3 | 5.4 | 6.5 | 5.9 | 7.4 | 5.9 | 5.6 | 5.4 | 5.2 | 5.1 |
| 5 | 4.9 | 5.2 | 5.3 | 5.4 | 6.4 | 6.2 | 7.2 | 5.9 | 5.6 | 5.4 | 5.2 | 5.1 |
| 6 | 4.8 | 5.1 | 5.3 | 5.4 | 6.3 | 6.0 | 7.0 | 5.9 | 5.6 | 5.4 | 5.2 | 5.1 |
| 7 | 4.9 | 5.1 | 5.3 | 5.4 | 6.2 | 6.0 | 6.9 | 5.8 | 5.6 | 5.4 | 5.2 | 5.1 |
| 8 | 4.9 | 5.1 | 5.3 | 5.3 | 7.6 | 6.3 | 6.8 | 5.8 | 5.6 | 5.4 | 5.2 | 5.1 |
| 9 | 4.9 | 5.1 | 5.4 | 5.3 | 6.8 | 6.3 | 6.6 | 5.8 | 5.6 | 5.4 | 5.2 | 5.0 |
| 10 | 4.9 | 7.0 | 5.8 | 5.3 | 6.7 | 6.2 | 6.5 | 5.8 | 5.5 | 5.3 | 5.2 | 5.0 |
| 11 | 4.9 | 5.9 | 5.7 | 5.3 | 6.5 | 6.1 | 6.5 | 5.8 | 5.5 | 5.4 | 5.2 | 5.0 |
| 12 | 4.9 | 5.5 | 5.7 | 5.3 | 6.4 | 6.1 | 6.4 | 5.8 | 5.5 | 5.4 | 5.2 | 5.0 |
| 13 | 5.0 | 5.5 | 5.7 | 5.3 | 6.4 | 6.0 | 6.3 | 5.8 | 5.5 | 5.3 | 5.2 | 5.0 |
| 14 | 4.9 | 5.4 | 5.6 | 5.3 | 6.3 | 6.9 | 6.3 | 5.8 | 5.5 | 5.3 | 5.2 | 5.0 |
| 15 | 5.0 | 5.4 | 5.5 | 5.3 | 6.3 | 6.5 | 6.3 | 5.8 | 5.5 | 5.3 | 5.2 | |

—Continued.

*Daily gage height, in feet, of Arroyo Seco near Soledad, Cal., for 1901–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 21 | 5.55 | 5.50 | 5.45 | 6.5 | 6.6 | 7.35 | 6.05 | 6.0 | 5.7 | 5.4 | 5.3 | 5.2 |
| 22 | 5.50 | 5.50 | 5.45 | 6.2 | 6.5 | 7.1 | 6.05 | 6.0 | 5.65 | 5.4 | 5.3 | 5.2 |
| 23 | 5.50 | 5.50 | 5.45 | 6.1 | 6.4 | 6.9 | 6.0 | 5.95 | 5.65 | 5.4 | 5.3 | 5.2 |
| 24 | 5.50 | 5.45 | 5.45 | 6.05 | 6.35 | 6.75 | 6.0 | 5.9 | 5.65 | 5.4 | 5.3 | 5.2 |
| 25 | 5.50 | 5.45 | 5.75 | 6.1 | 6.3 | 6.7 | 6.0 | 5.9 | 5.6 | 5.4 | 5.3 | 5.2 |
| 26 | 5.50 | 5.50 | 5.55 | 6.0 | 6.25 | 6.65 | 6.0 | 5.95 | 5.6 | 5.4 | 5.3 | 5.2 |
| 27 | 5.50 | 5.50 | 5.50 | 6.0 | 6.2 | 6.55 | 6.0 | 5.95 | 5.6 | 5.4 | 5.25 | 5.2 |
| 28 | 5.50 | 5.50 | 5.50 | 6.0 | 6.2 | 6.5 | 6.0 | 5.95 | 5.6 | 5.4 | 5.25 | 5.2 |
| 29 | 5.50 | 5.50 | 5.50 | 5.95 | ...... | 7.5 | 5.95 | 5.9 | 5.6 | 5.4 | 5.25 | 5.2 |
| 30 | 5.50 | 5.50 | 5.50 | 5.9 | ...... | 6.65 | 5.95 | 5.9 | 5.6 | 5.4 | 5.25 | 5.2 |
| 31 | 5.50 | ...... | 7.40 | 5.9 | ...... | 6.6 | ...... | 5.85 | ...... | 5.4 | 5.25 | ...... |
| 1905–6. | | | | | | | | | | | | |
| 1 | 5.25 | 5.35 | 5.65 | 5.55 | 5.65 | 6.2 | 8.3 | 5.95 | 6.1 | 5.4 | 5.1 | 4.5 |
| 2 | 5.25 | 5.35 | 5.6 | 5.52 | 5.6 | 6.15 | 8.0 | 5.9 | 6.05 | 5.4 | 5.1 | 4.5 |
| 3 | 5.25 | 5.35 | 5.55 | 5.52 | 5.58 | 6.6 | 7.75 | 5.9 | 6.0 | 5.4 | 5.1 | 4.7 |
| 4 | 5.25 | 5.35 | 5.5 | 5.53 | 5.55 | 8.45 | 7.55 | 5.9 | 6.0 | 5.35 | 5.1 | 4.6 |
| 5 | 5.25 | 5.35 | 5.5 | 5.52 | 5.52 | 6.9 | 7.35 | 5.8 | 5.9 | 5.35 | 5.1 | 4.6 |
| 6 | 5.25 | 5.35 | 5.5 | 5.52 | 5.6 | 6.65 | 7.2 | 5.8 | 5.9 | 5.35 | 5.1 | 4.6 |
| 7 | 5.25 | 5.35 | 5.5 | 5.52 | 5.5 | 6.5 | 7.0 | 5.8 | 5.85 | 5.3 | 5.1 | 4.6 |
| 8 | 5.25 | 5.35 | 5.5 | 5.52 | 5.49 | 6.39 | 6.95 | 5.75 | 5.8 | 5.3 | 5.1 | 4.6 |
| 9 | 5.25 | 5.35 | 5.5 | 5.51 | 5.45 | 6.3 | 6.8 | 5.7 | 5.8 | 5.3 | 5.1 | 4.5 |
| 10 | 5.25 | 5.35 | 5.5 | 5.51 | 5.41 | 6.21 | 6.7 | 5.7 | 5.75 | 5.3 | 5.1 | 4.6 |
| 11 | 5.25 | 5.35 | 5.5 | 5.52 | 5.7 | 6.28 | 6.6 | 5.8 | 5.7 | 5.3 | 5.05 | 4.6 |
| 12 | 5.25 | 5.35 | 5.5 | 6.85 | 5.51 | 11.3 | 6.5 | 5.75 | 5.7 | 5.25 | 5.05 | 4.6 |
| 13 | 5.25 | 5.35 | 5.5 | 8.18 | 5.8 | 8.15 | 6.5 | 5.7 | 5.7 | 5.25 | 5.05 | 4.6 |
| 14 | 5.25 | 5.35 | 5.5 | 7.48 | 5.92 | 7.8 | 6.4 | 5.7 | 5.65 | 5.25 | 5.05 | 4.6 |
| 15 | 5.25 | 5.35 | 5.5 | 7.30 | 7.05 | 10.1 | 6.35 | 5.7 | 5.65 | 5.2 | 5.0 | 4.7 |
| 16 | 5.25 | 5.35 | 5.5 | 6.75 | 6.45 | 9.25 | 6.3 | 5.7 | 5.6 | 5.2 | 5.0 | 4.7 |
| 17 | 5.3 | 5.4 | 5.5 | 7.98 | 6.3 | 8.4 | 6.3 | 5.65 | 5.6 | 5.2 | 5.0 | 4.8 |
| 18 | 5.3 | 5.4 | 5.55 | 7.98 | 6.28 | 7.88 | 6.2 | 5.6 | 5.6 | 5.2 | 5.0 | 4.9 |
| 19 | 5.3 | 5.4 | 5.6 | 10.12 | 6.18 | 7.6 | 6.2 | 5.6 | 5.55 | 5.2 | 5.0 | 4.9 |
| 20 | 5.3 | 5.4 | 5.6 | 8.0 | 6.1 | 7.3 | 6.2 | 5.6 | 5.5 | 5.2 | 5.0 | 5.0 |
| 21 | 5.3 | 5.4 | 5.6 | 7.2 | 6.3 | 7.95 | 6.2 | 5.6 | 5.5 | 5.2 | 5.0 | 5.0 |
| 22 | 5.3 | 5.4 | 5.6 | 6.8 | 6.85 | 7.48 | 6.2 | 5.6 | 5.5 | 5.2 | 5.05 | 5.0 |
| 23 | 5.35 | 5.4 | 5.6 | 6.5 | 6.6 | 8.94 | 6.2 | 5.6 | 5.5 | 5.2 | 5.05 | 5.0 |
| 24 | 5.35 | 5.5 | 5.55 | 6.3 | 6.59 | 8.85 | 6.2 | 5.6 | 5.5 | 5.2 | 5.05 | 5.0 |
| 25 | 5.35 | 5.65 | 5.55 | 6.15 | 6.49 | 8.7 | 6.2 | 5.6 | 5.5 | 5.2 | 5.05 | 5.05 |
| 26 | 5.35 | 5.5 | 5.5 | 6.0 | 6.39 | 9.0 | 6.05 | 6.55 | 5.5 | 5.15 | 5.0 | 5.05 |
| 27 | 5.35 | 5.5 | 5.5 | 5.95 | 6.3 | 8.35 | 6.05 | 8.3 | 5.5 | 5.1 | 5.0 | 5.05 |
| 28 | 5.35 | 5.75 | 5.5 | 5.9 | 6.3 | 8.0 | 6.0 | 7.3 | 5.5 | 5.1 | 4.9 | 5.05 |
| 29 | 5.35 | 5.6 | 5.55 | 5.85 | ...... | 7.7 | 6.0 | 6.75 | 5.45 | 5.15 | 4.8 | 5.0 |
| 30 | 5.35 | 5.9 | 5.5 | 5.75 | ...... | 8.12 | 6.0 | 6.45 | 5.4 | 5.1 | 4.7 | 5.0 |
| 31 | 5.3 | ...... | 5.5 | 5.7 | ...... | 9.08 | ...... | 6.4 | ...... | 5.1 | 4.6 | ...... |
| 1906–7. | | | | | | | | | | | | |
| 1 | 5.0 | 5.05 | 5.2 | 6.6 | 7.55 | 6.15 | 7.8 | 5.95 | 5.5 | 5.25 | 5.05 | 5.0 |
| 2 | 5.0 | 5.05 | 5.15 | 6.3 | 7.45 | 6.15 | 7.6 | 5.9 | 5.5 | 5.25 | 5.05 | 5.0 |
| 3 | 5.0 | 5.05 | 5.15 | 6.3 | 7.5 | 6.1 | 7.45 | 5.9 | 5.5 | 5.25 | 5.05 | 5.0 |
| 4 | 5.0 | 5.25 | 5.15 | 6.05 | 7.3 | 6.8 | 7.3 | 5.9 | 5.5 | 5.2 | 5.05 | 5.0 |
| 5 | 5.0 | 5.5 | 5.15 | 6.25 | 7.25 | 7.9 | 7.25 | 5.85 | 5.5 | 5.2 | 5.05 | 5.0 |
| 6 | 5.0 | 5.25 | 5.15 | 6.1 | 7.1 | 7.4 | 7.1 | 5.85 | 5.5 | 5.2 | 5.0 | 5.0 |
| 7 | 4.9 | 5.15 | 5.15 | 6.1 | 7.0 | 7.0 | 7.0 | 5.8 | 5.5 | 5.2 | 5.0 | 5.0 |
| 8 | 4.8 | 5.15 | 5.15 | 7.1 | 6.9 | 6.85 | 6.9 | 5.8 | 5.5 | 5.2 | 5.0 | 5.0 |
| 9 | 4.8 | 5.1 | 5.3 | 10.10 | 6.85 | 7.4 | 6.8 | 5.8 | 5.45 | 5.2 | 5.0 | 5.0 |
| 10 | 4.8 | 5.1 | 5.3 | 10.10 | 6.7 | 8.6 | 6.75 | 5.8 | 5.45 | 5.2 | 4.9 | 5.0 |
| 11 | 4.8 | 5.1 | a13.0 | 9.70 | 6.6 | 8.4 | 6.7 | 5.8 | 5.45 | 5.2 | 5.0 | 4.95 |
| 12 | 4.9 | 5.1 | 7.95 | 8.5 | 6.6 | 8.1 | 6.6 | 5.75 | 5.45 | 5.2 | 5.0 | 4.95 |
| 13 | 5.0 | 5.1 | 7.2 | 7.9 | 6.5 | 7.75 | 6.55 | 5.75 | 5.5 | 5.2 | 5.0 | 4.95 |
| 14 | 5.0 | 5.1 | 6.6 | 7.9 | 6.5 | 7.5 | 6.5 | 5.75 | 5.5 | 5.15 | 4.95 | 4.95 |
| 15 | 5.0 | 5.1 | 6.2 | 7.55 | 6.4 | 7.35 | 6.5 | 5.7 | 5.45 | 5.15 | 4.95 | 4.95 |
| 16 | 5.0 | 5.1 | 6.1 | 7.8 | 6.4 | 7.3 | 6.4 | 5.7 | 5.45 | 5.15 | 4.95 | 4.95 |
| 17 | 5.0 | 5.1 | 5.85 | 8.4 | 6.4 | 7.9 | 6.4 | 5.7 | 5.4 | 5.15 | 4.95 | 4.95 |
| 18 | 5.0 | 5.1 | 5.8 | 7.7 | 6.4 | 9.35 | 6.3 | 5.65 | 5.4 | 5.1 | 4.95 | 4.95 |
| 19 | 5.0 | 5.1 | 5.7 | 7.5 | 6.3 | 11.85 | 6.3 | 5.65 | 5.4 | 5.1 | 4.95 | 4.95 |
| 20 | 5.0 | 5.1 | 5.6 | 7.25 | 6.3 | 10.20 | 6.25 | 5.65 | 5.4 | 5.1 | 4.95 | 4.95 |
| 21 | 5.0 | 5.1 | 5.55 | 7.15 | 6.5 | 9.25 | 6.2 | 5.6 | 5.35 | 5.1 | 4.95 | 4.95 |
| 22 | 5.05 | 5.15 | 5.5 | 7.1 | 6.5 | 8.90 | 6.15 | 5.6 | 5.35 | 5.1 | 4.95 | 4.95 |
| 23 | 5.05 | 5.15 | 5.5 | 7.05 | 6.4 | 12.00 | 6.1 | 5.65 | 5.35 | 5.1 | 4.95 | 4.95 |
| 24 | 5.05 | 5.1 | 5.5 | 7.1 | 6.4 | 11.60 | 6.1 | 5.65 | 5.35 | 5.1 | 4.9 | 4.95 |
| 25 | 5.05 | 5.15 | 5.5 | 7.5 | 6.4 | 11.20 | 6.1 | 5.6 | 5.3 | 5.1 | 4.9 | 4.9 |

a Estimated.

[illegible]

*Daily gage height, in feet, of Arroyo Seco near Soledad, Cal., for 1901–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1909–10.** | | | | | | | | | | | | |
| 1 | 5.25 | 5.3 | 5.4 | 8.15 | 6.15 | 5.75 | 6.50 | 5.7 | 5.4 | 5.25 | 5.05 | 4.93 |
| 2 | 5.3 | 5.3 | 5.4 | 6.5 | 6.15 | 5.75 | 6.40 | 5.7 | 5.4 | 5.25 | 5.05 | 4.93 |
| 3 | 5.3 | 5.3 | 5.4 | 6.4 | 6.1 | 5.7 | 6.35 | 5.7 | 5.4 | 5.24 | 5.04 | 4.92 |
| 4 | 5.3 | 5.3 | 5.4 | 6.2 | 6.0 | 5.7 | 6.28 | 5.7 | 5.4 | 5.24 | 5.03 | 4.91 |
| 5 | 5.3 | 5.3 | 5.6 | 6.0 | 6.0 | 5.7 | 6.20 | 5.7 | 5.4 | 5.22 | 5.03 | 4.9 |
| 6 | 5.3 | 5.3 | 5.8 | 5.95 | 5.95 | 5.7 | 6.20 | 5.7 | 5.4 | 5.22 | 5.03 | 4.89 |
| 7 | 5.25 | 5.4 | 6.1 | 5.9 | 6.0 | 5.7 | 6.15 | 5.7 | 5.4 | 5.21 | 5.02 | 4.86 |
| 8 | 5.25 | 5.4 | 9.25 | 5.9 | 6.0 | 5.7 | 6.1 | 5.7 | 5.4 | 5.21 | 5.01 | 4.84 |
| 9 | 5.2 | 5.35 | 8.6 | 5.85 | 5.95 | 5.7 | 6.1 | 5.65 | 5.4 | 5.20 | 5.0 | 4.82 |
| 10 | 5.2 | 5.35 | 6.45 | 5.85 | 5.9 | 5.7 | 6.05 | 5.65 | 5.4 | 5.20 | 5.0 | 4.81 |
| 11 | 5.2 | 5.4 | 6.2 | 5.8 | 5.9 | 5.65 | 6.1 | 5.6 | 5.4 | 5.20 | 5.0 | 4.8 |
| 12 | 5.2 | 5.4 | 6.0 | 5.8 | 5.9 | 5.65 | 6.05 | 5.6 | 5.4 | 5.19 | 5.0 | 4.78 |
| 13 | 5.2 | 5.35 | 5.9 | 5.75 | 5.85 | 5.65 | 6.0 | 5.6 | 5.4 | 5.16 | 4.98 | 4.72 |
| 14 | 5.2 | 5.4 | 5.8 | 6.6 | 5.85 | 5.7 | 6.0 | 5.6 | 5.4 | 5.16 | 4.98 | 4.7 |
| 15 | 5.25 | 5.4 | 5.8 | 7.05 | 5.85 | 5.7 | 5.95 | 5.05 | 5.4 | 5.15 | 4.98 | 4.78 |
| 16 | 5.25 | 5.4 | 5.8 | 7.05 | 5.8 | 5.7 | 5.9 | 5.55 | 5.35 | 5.15 | 4.98 | 4.8 |
| 17 | 5.25 | 5.4 | 5.7 | 6.8 | 5.8 | 5.7 | 5.9 | 5.55 | 5.35 | 5.15 | 4.98 | 5.15 |
| 18 | 5.25 | 5.4 | 5.7 | 6.5 | 5.8 | 5.7 | 5.9 | 5.55 | 5.35 | 5.15 | 4.98 | 5.15 |
| 19 | 5.25 | 5.35 | 5.7 | 6.4 | 5.8 | 5.7 | 5.85 | 5.55 | 5.35 | 5.13 | 4.98 | 5.14 |
| 20 | 5.25 | 5.35 | 5.7 | 6.35 | 5.8 | 6.8 | 5.85 | 5.55 | 5.35 | 5.13 | 4.98 | 5.14 |
| 21 | 5.25 | 5.35 | 5.7 | 6.25 | 5.75 | 8.7 | 5.85 | 5.55 | 5.35 | 5.12 | 4.98 | 5.13 |
| 22 | 5.25 | 5.35 | 5.7 | 6.2 | 5.75 | 8.6 | 5.8 | 5.5 | 5.35 | 5.1 | 4.98 | 5.13 |
| 23 | 5.25 | 5.35 | 5.65 | 6.1 | 5.85 | 7.6 | 5.8 | 5.5 | 5.35 | 5.1 | 4.98 | 5.12 |
| 24 | 5.25 | 5.35 | 5.65 | 7.35 | 5.8 | 7.05 | 5.8 | 5.5 | 5.3 | 5.09 | 4.97 | 5.12 |
| 25 | 5.25 | 5.4 | 5.6 | 6.9 | 5.8 | 6.75 | 5.75 | 5.5 | 5.3 | 5.09 | 4.96 | 5.12 |
| 26 | 5.25 | 5.4 | 5.6 | 6.7 | 5.8 | 6.6 | 5.75 | 5.5 | 5.3 | 5.09 | 4.95 | 5.12 |
| 27 | 5.25 | 5.4 | 5.6 | 6.5 | 5.75 | 7.5 | 5.75 | 5.45 | 5.3 | 5.08 | 4.95 | 5.12 |
| 28 | 5.25 | 5.4 | 5.6 | 6.35 | 5.75 | 7.0 | 5.75 | 5.45 | 5.25 | 5.08 | 4.94 | 5.12 |
| 29 | 5.25 | 5.4 | 5.6 | 6.3 | ...... | 6.8 | 5.7 | 5.45 | 5.25 | 5.06 | 4.93 | 5.12 |
| 30 | 5.3 | 5.4 | 5.6 | 6.2 | ...... | 6.7 | 5.7 | 5.45 | 5.25 | 5.05 | 4.93 | 5.12 |
| 31 | 5.3 | ...... | 5.7 | 6.2 | ...... | 6.6 | ...... | 5.45 | ...... | 5.05 | 4.93 | ...... |
| **1910–11.** | | | | | | | | | | | | |
| 1 | 5.1 | 5.2 | 5.35 | 5.39 | 9.40 | 7.05 | 5.59 | 4.80 | 4.36 | 4.05 | 3.75 | 3.64 |
| 2 | 5.1 | 5.25 | 5.35 | 5.39 | 8.50 | 7.10 | 5.55 | 4.78 | 4.35 | 4.04 | 3.72 | 3.63 |
| 4 | 5.1 | 5.25 | 5.35 | 5.39 | 8.25 | 11.50 | 5.50 | 4.76 | 4.34 | 4.03 | 3.75 | 3.63 |
| 4 | 5.1 | 5.25 | 5.4 | 5.39 | 7.90 | 9.60 | 5.40 | 4.75 | 4.33 | 4.01 | 3.78 | 3.63 |
| 5 | 5.1 | 5.25 | 5.4 | 5.39 | 7.60 | 11.40 | 5.52 | 4.75 | 4.30 | 4.00 | 3.78 | 3.65 |
| 6 | 5.1 | 5.25 | 5.4 | 5.39 | 7.40 | 15.90 | 5.70 | 4.73 | 4.28 | 3.98 | 3.78 | 3.65 |
| 7 | 5.1 | 5.25 | 5.35 | 5.39 | 7.15 | 18.30 | 5.52 | 4.71 | 4.28 | 3.98 | 3.97 | 3.65 |
| 8 | 5.1 | 5.25 | 5.35 | 5.39 | 7.00 | 13.20 | 5.50 | 4.69 | 4.26 | 3.97 | 3.77 | 3.65 |
| 9 | 5.1 | 5.25 | 5.35 | 5.61 | 6.90 | 10.50 | 5.40 | 4.67 | 4.26 | 3.95 | 3.75 | 3.65 |
| 10 | 5.1 | 5.25 | 5.4 | 6.30 | 6.80 | 9.60 | 5.35 | 4.65 | 4.25 | 3.94 | 3.75 | 3.65 |
| 11 | 5.12 | 5.3 | 5.4 | 5.80 | 7.25 | 8.60 | 5.32 | 4.63 | 4.23 | 3.93 | 3.75 | 3.63 |
| 12 | 5.18 | 5.3 | 5.45 | 8.85 | 6.95 | 8.40 | 5.25 | 4.62 | 4.22 | 3.91 | 3.75 | 3.63 |
| 13 | 5.3 | 5.3 | 5.45 | 11.20 | 7.20 | 8.05 | 5.22 | 4.60 | 4.22 | 3.91 | 3.75 | 3.62 |
| 14 | 5.3 | 5.3 | 5.4 | 11.85 | 7.15 | 7.80 | 5.20 | 4.58 | 4.22 | 3.90 | 3.73 | 3.61 |
| 15 | 5.25 | 5.3 | 5.4 | 8.80 | 7.00 | 7.60 | 5.15 | 4.57 | 4.22 | 3.90 | 3.72 | 3.63 |
| 16 | 5.25 | 5.3 | 5.4 | 7.50 | 6.90 | 7.41 | 5.10 | 4.56 | 4.22 | 3.90 | 3.71 | 3.65 |
| 17 | 5.25 | 5.3 | 5.4 | 6.60 | 6.85 | 7.25 | 5.10 | 4.55 | 4.20 | 3.90 | 3.70 | 3.65 |
| 18 | 5.2 | 5.3 | 5.4 | 6.50 | 6.70 | 7.00 | 5.05 | 4.52 | 4.20 | 3.89 | 3.70 | 3.65 |
| 19 | 5.2 | 5.3 | 5.4 | 6.45 | 6.65 | 6.90 | 5.01 | 4.50 | 4.18 | 3.89 | 3.70 | 3.63 |
| 20 | 5.2 | 5.3 | 5.4 | 6.35 | 6.60 | 6.80 | 5.00 | 4.48 | 4.16 | 3.89 | 3.69 | 3.63 |
| 21 | 5.2 | 5.3 | 5.4 | 6.41 | 6.50 | 6.60 | 5.00 | 4.46 | 4.15 | 3.88 | 3.68 | 3.63 |
| 22 | 5.2 | 5.3 | 5.4 | 6.30 | 6.48 | 6.40 | 4.98 | 4.45 | 4.15 | 3.88 | 3.67 | 3.70 |
| 23 | 5.2 | 5.3 | 5.4 | 6.20 | 6.45 | 6.30 | 4.92 | 4.43 | 4.13 | 3.86 | 3.67 | 3.70 |
| 24 | 5.2 | 5.3 | 5.4 | 7.70 | 6.42 | 6.20 | 4.90 | 4.42 | 4.13 | 3.85 | 3.67 | 3.75 |
| 25 | 5.2 | 5.35 | 5.4 | 7.68 | 6.40 | 6.05 | 4.89 | 4.41 | 4.12 | 3.83 | 3.68 | 3.75 |
| 26 | 5.2 | 5.35 | 5.4 | 7.30 | 6.33 | 6.00 | 4.86 | 4.40 | 4.11 | 3.81 | 3.68 | 3.75 |
| 27 | 5.2 | 5.35 | 5.4 | 7.30 | 6.35 | 5.90 | 4.85 | 4.39 | 4.10 | 3.80 | 3.68 | 3.74 |
| 28 | 5.2 | 5.35 | 5.4 | 7.78 | 6.42 | 5.80 | 4.85 | 4.40 | 4.10 | 3.80 | 3.67 | 3.74 |
| 29 | 5.2 | 5.35 | 5.4 | 12.75 | ...... | 5.75 | 4.83 | 4.41 | 4.08 | 3.80 | 3.65 | 3.76 |
| 30 | 5.2 | 5.35 | 5.4 | 11.60 | ...... | 5.72 | 4.80 | 4.39 | 4.05 | 3.79 | 3.65 | 3.75 |
| 31 | 5.2 | ...... | 5.4 | 11.00 | ...... | 5.65 | ...... | 4.38 | ...... | 3.78 | 3.65 | ...... |

*Daily gage height, in feet, of Arroyo Seco near Soledad, Cal., for 1911–12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | ........ | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | ........ | [illegible] | [illegible] | ........ | [illegible] | ........ | [illegible] | ..... |

*Rating table for Arroyo Seco at Foster's ranch, near Piney, Cal.*

**January 1 to April 30, 1912.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 2.20 | 45 | 3.60 | 400 | 5.00 | 1,900 | 6.40 | 3,620 |
| 2.40 | 75 | 3.80 | 510 | 5.20 | 2,130 | 6.60 | 3,900 |
| 2.60 | 95 | 4.00 | 530 | 5.40 | 2,380 | 6.80 | 4,200 |
| 2.80 | 135 | 4.20 | 1,060 | 5.60 | 2,620 | 7.00 | 4,500 |
| 3.00 | 165 | 4.40 | 1,270 | 5.80 | 2,860 | | |
| 3.20 | 200 | 4.60 | 1,490 | 6.00 | 3,100 | | |
| 3.40 | 240 | 4.80 | 1,710 | 6.20 | 3,350 | | |

*Rating tables for Arroyo Seco near Soledad, Cal.*

**November 6, 1911, to December 31, 1912.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 5.00 | 7 | 6.80 | 620 | 8.60 | 2,200 | 10.40 | 5,130 |
| 5.20 | 15 | 7.00 | 750 | 8.80 | 2,450 | 10.60 | 5,540 |
| 5.40 | 40 | 7.20 | 890 | 9.00 | 2,720 | 10.80 | 5,960 |
| 5.60 | 75 | 7.40 | 1,030 | 9.20 | 3,010 | 11.00 | 6,380 |
| 5.80 | 145 | 7.60 | 1,190 | 9.40 | 3,320 | 11.20 | 6,800 |
| 6.00 | 230 | 7.80 | 1,360 | 9.60 | 3,650 | 11.40 | 7,220 |
| 6.20 | 320 | 8.00 | 1,550 | 9.80 | 4,000 | 11.60 | 7,650 |
| 6.40 | 410 | 8.20 | 1,750 | 10.00 | 4,360 | 11.80 | 8,080 |
| 6.60 | 510 | 8.40 | 1,970 | 10.20 | 4,740 | 12.00 | 8,530 |

*Rating tables for Arroyo near Soledad, Cal.*—Continued.

**January 1 to December 31, 1903.**

| Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. | Gage height. | Dis-charge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 5.00 | 1 | 6.00 | 150 | 7.00 | 600 | 8.20 | 1,430 |
| 5.10 | 6 | 6.10 | 190 | 7.10 | 660 | 8.40 | 1,610 |
| 5.20 | 13 | 6.20 | 230 | 7.20 | 720 | 8.60 | 1,790 |
| 5.30 | 22 | 6.30 | 270 | 7.30 | 780 | 8.80 | 1,970 |
| 5.40 | 32 | 6.40 | 310 | 7.40 | 840 | 9.00 | 2,170 |
| 5.50 | 44 | 6.50 | 350 | 7.50 | 900 | 9.20 | 2,380 |
| 5.60 | 56 | 6.60 | 400 | 7.60 | 970 | 9.40 | 2,600 |
| 5.70 | 72 | 6.70 | 450 | 7.70 | 1,040 | 9.60 | 2,830 |
| 5.80 | 92 | 6.80 | 500 | 7.80 | 1,110 | 9.80 | 3,080 |
| 5.90 | 120 | 6.90 | 550 | 8.00 | 1,270 | 10.00 | 3,350 |

**January 1 to December 31, 1904.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5.00 | 0 | 6.30 | 230 | 7.60 | 930 | 8.90 | 1,960 |
| 5.10 | 0.5 | 6.40 | 270 | 7.70 | 1,000 | 9.00 | 2,050 |
| 5.20 | 1 | 6.50 | 310 | 7.80 | 1,070 | 9.20 | 2,250 |
| 5.30 | 3 | 6.60 | 360 | 7.90 | 1,140 | 9.40 | 2,460 |
| 5.40 | 9 | 6.70 | 410 | 8.00 | 1,210 | 9.60 | 2,680 |
| 5.50 | 18 | 6.80 | 460 | 8.10 | 1,290 | 9.80 | 2,900 |
| 5.60 | 30 | 6.90 | 510 | 8.20 | 1,370 | 10.00 | 3,140 |
| 5.70 | 48 | 7.00 | 560 | 8.30 | 1,450 | 10.20 | 3,380 |
| 5.80 | 71 | 7.10 | 620 | 8.40 | 1,530 | 10.40 | 3,620 |
| 5.90 | 100 | 7.20 | 680 | 8.50 | 1,610 | 10.60 | 3,880 |
| 6.00 | 130 | 7.30 | 740 | 8.60 | 1,690 | 10.80 | 4,140 |
| 6.10 | 160 | 7.40 | 800 | 8.70 | 1,780 | 11.00 | 4,410 |
| 6.20 | 195 | 7.50 | 860 | 8.80 | 1,870 | 11.50 | 5,150 |

**January 1 to December 31, 1905.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5.20 | 2 | 6.30 | 265 | 7.40 | 800 | 9.00 | 1,900 |
| 5.30 | 6 | 6.40 | 305 | 7.50 | 860 | 9.20 | 2,060 |
| 5.40 | 15 | 6.50 | 345 | 7.60 | 920 | 9.40 | 2,225 |
| 5.50 | 30 | 6.60 | 390 | 7.70 | 980 | 9.60 | 2,400 |
| 5.60 | 50 | 6.70 | 435 | 7.80 | 1,045 | 9.80 | 2,580 |
| 5.70 | 70 | 6.80 | 480 | 7.90 | 1,110 | 10.00 | 2,760 |
| 5.80 | 95 | 6.90 | 530 | 8.00 | 1,175 | 10.20 | 2,945 |
| 5.90 | 125 | 7.00 | 580 | 8.20 | 1,310 | 10.40 | 3,135 |
| 6.00 | 155 | 7.10 | 635 | 8.40 | 1,450 | | |
| 6.10 | 190 | 7.20 | 690 | 8.60 | 1,595 | | |
| 6.20 | 225 | 7.30 | 745 | 8.80 | 1,745 | | |

NOTE.—The above table is applicable only for open-channel conditions. It is based on 31 discharge measurements made during 1905. It is well defined between gage heights 5.3 feet and 9.5 feet.

**January 1 to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.50 | 0 | 5.90 | 252 | 7.30 | 868 | 9.40 | 2,580 |
| 4.60 | 1 | 6.00 | 286 | 7.40 | 928 | 9.60 | 2,780 |
| 4.70 | 3 | 6.10 | 320 | 7.50 | 990 | 9.80 | 2,980 |
| 4.80 | 5 | 6.20 | 356 | 7.60 | 1,055 | 10.00 | 3,180 |
| 4.90 | 8 | 6.30 | 393 | 7.70 | 1,125 | 10.20 | 3,380 |
| 5.00 | 14 | 6.40 | 431 | 7.80 | 1,195 | 10.40 | 3,580 |
| 5.10 | 24 | 6.50 | 470 | 7.90 | 1,265 | 10.60 | 3,780 |
| 5.20 | 40 | 6.60 | 510 | 8.00 | 1,340 | 10.80 | 3,980 |
| 5.30 | 63 | 6.70 | 553 | 8.20 | 1,495 | 11.00 | 4,180 |
| 5.40 | 91 | 6.80 | 599 | 8.40 | 1,660 | 12.00 | 5,180 |
| 5.50 | 121 | 6.90 | 648 | 8.60 | 1,840 | 13.00 | 6,250 |
| 5.60 | 153 | 7.00 | 700 | 8.80 | 2,020 | | |
| 5.70 | 185 | 7.10 | 754 | 9.00 | 2,200 | | |
| 5.80 | 218 | 7.20 | 810 | 9.20 | 2,390 | | |

NOTE.—This table is based on 35 discharge measurements made during 1906 and is well defined between gage heights 5 feet and 10 feet.

*Rating tables for Arroyo Seco near Soledad, Cal.*—Continued.

**January 1, 1907, to December 31, 1908.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 4.50 | 0.5 | 5.80 | 216 | 7.10 | 760 | 8.80 | 2,000 |
| 4.60 | 1 | 5.90 | 250 | 7.20 | 815 | 9.00 | 2,180 |
| 4.70 | 2 | 6.00 | 285 | 7.30 | 870 | 9.20 | 2,365 |
| 4.80 | 4 | 6.10 | 320 | 7.40 | 925 | 9.40 | 2,555 |
| 4.90 | 11 | 6.20 | 355 | 7.50 | 980 | 9.60 | 2,745 |
| 5.00 | 21 | 6.30 | 395 | 7.60 | 1,040 | 9.80 | 2,935 |
| 5.10 | 33 | 6.40 | 435 | 7.70 | 1,105 | 10.00 | 3,125 |
| 5.20 | 47 | 6.50 | 475 | 7.80 | 1,175 | 10.20 | 3,320 |
| 5.30 | 64 | 6.60 | 520 | 7.90 | 1,250 | 10.40 | 3,520 |
| 5.40 | 88 | 6.70 | 565 | 8.00 | 1,330 | 10.60 | 3,720 |
| 5.50 | 118 | 6.80 | 610 | 8.20 | 1,490 | 10.80 | 3,920 |
| 5.60 | 150 | 6.90 | 660 | 8.40 | 1,655 | 11.00 | 4,125 |
| 5.70 | 183 | 7.00 | 710 | 8.60 | 1,825 | 12.00 | 5,175 |

NOTE.—Table applicable only to open channel. It is based upon 34 discharge measurements made during 1907 and 1908 and is well defined between gage heights 4.8 feet and 12 feet.

*Daily discharge, in second-feet, of Arroyo Seco near Soledad, Cal., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 33 | 1,040 | 480 | 608 | 178 | 79 | 31 | 18 | [illegible] |
| 2 | 76 | 1,010 | 455 | 580 | 178 | 79 | 31 | 15 | [illegible] |
| 3 | 64 | 3,200 | 430 | 555 | 158 | 79 | 31 | 15 | [illegible] |
| 4 | 88 | 1,700 | 430 | 530 | 158 | 79 | 31 | 15 | [illegible] |
| 5 | 64 | 1,460 | 430 | 505 | 158 | 68 | 31 | 15 | [illegible] |
| 6 | 103 | 1,250 | 455 | 480 | 139 | 68 | 31 | 15 | [illegible] |
| 7 | 302 | 1,940 | 430 | 455 | 139 | 68 | 31 | 15 | [illegible] |
| 8 | 815 | 1,540 | 385 | 430 | 139 | 68 | 31 | 15 | [illegible] |
| 9 | 1,250 | 1,390 | 385 | 408 | 139 | 58 | 26 | 15 | [illegible] |
| 10 | 395 | 1,180 | 364 | 385 | 139 | 58 | 31 | 15 | [illegible] |
| 11 | 320 | 4,130 | 342 | 364 | 122 | 58 | 26 | 15 | [illegible] |
| 12 | 302 | 5,340 | 342 | 364 | 122 | 50 | 26 | 15 | [illegible] |
| 13 | 1,660 | 3,920 | 321 | 300 | 122 | 50 | 26 | 15 | [illegible] |
| 14 | 4,340 | 2,140 | 300 | 300 | 122 | 50 | 26 | 15 | [illegible] |
| 15 | 2,360 | 1,860 | 300 | 300 | 106 | 50 | 22 | 15 | [illegible] |
| 16 | 1,210 | 1,540 | 280 | 300 | 106 | 42 | 22 | 15 | [illegible] |
| 17 | 710 | 1,320 | 280 | 280 | 106 | 42 | 22 | 12 | [illegible] |
| 18 | 635 | 1,110 | 259 | 259 | 106 | 58 | 22 | 12 | [illegible] |
| 19 | 475 | 980 | 259 | 259 | 106 | 58 | 22 | 12 | [illegible] |
| 20 | 475 | 860 | 259 | 259 | 106 | 58 | 18 | 12 | [illegible] |
| 21 | 6,150 | 980 | 555 | 238 | 106 | 50 | 18 | 12 | [illegible] |
| 22 | 3,500 | 860 | 342 | 238 | 106 | 50 | 18 | 12 | [illegible] |
| 23 | 1,700 | 745 | 321 | 238 | 92 | 42 | 18 | 12 | [illegible] |
| 24 | 1,390 | 690 | 480 | 218 | 92 | 42 | 18 | 10 | [illegible] |
| 25 | 1,860 | 635 | 690 | 218 | 92 | 42 | 18 | 10 | [illegible] |
| 26 | 5,460 | 580 | 690 | 198 | 92 | 42 | 18 | 10 | [illegible] |
| 27 | 2,270 | 530 | 635 | 198 | 79 | 36 | 18 | 10 | [illegible] |
| 28 | 1,540 | 505 | 385 | 198 | 92 | 36 | 18 | 10 | [illegible] |
| 29 | 1,110 | ........ | 1,060 | 178 | 92 | 36 | 18 | 10 | [illegible] |
| 30 | 1,390 | ........ | 745 | 178 | 92 | 36 | 18 | 10 | [illegible] |
| 31 | 1,110 | ........ | 662 | ........ | 92 | ........ | 18 | 10 | ...... |

*Daily discharge, in second-feet, of Arroyo Seco near Soledad, Cal., for 1909–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 18 | 22 | 31 | 1,360 | 238 | 100 | 385 | 86 | 27 | 12 | 2.6 | 1.2 |
| 2 | 22 | 22 | 31 | 385 | 238 | 100 | 342 | 86 | 27 | 12 | 2.6 | 1.2 |
| 3 | 22 | 22 | 31 | 342 | 217 | 86 | 321 | 86 | 27 | 11 | 2.5 | 1.2 |
| 4 | 22 | 22 | 38 | 258 | 179 | 86 | 292 | 86 | 27 | 11 | 2.3 | 1.1 |
| 5 | 22 | 22 | 15 | 179 | 179 | 86 | 258 | 86 | 27 | 9.4 | 2.3 | 1.0 |
| 6 | 22 | 22 | 108 | 162 | 162 | 86 | 258 | 86 | 27 | 9.4 | 2.3 | 1.0 |
| 7 | 18 | 31 | 216 | 144 | 179 | 86 | 238 | 86 | 27 | 8.7 | 2.1 | .9 |
| 8 | 18 | 31 | 2,220 | 144 | 179 | 86 | 217 | 86 | 27 | 8.7 | 2.0 | .8 |
| 9 | 15 | 26 | 1,700 | 128 | 162 | 86 | 217 | 74 | 27 | 8 | 1.8 | .8 |
| 10 | 15 | 26 | 364 | 128 | 144 | 86 | 198 | 74 | 27 | 8 | 1.8 | .7 |
| 11 | 15 | 31 | 259 | 113 | 144 | 74 | 217 | 62 | 27 | 8 | 1.8 | .7 |
| 12 | 15 | 31 | 178 | 113 | 144 | 74 | 198 | 62 | 27 | 7.6 | 1.8 | .7 |
| 13 | 15 | 26 | 139 | 100 | 128 | 74 | 179 | 62 | 27 | 6.2 | 1.6 | .5 |
| 14 | 15 | 31 | 109 | 430 | 128 | 86 | 179 | 62 | 27 | 6.2 | 1.6 | .5 |
| 15 | 18 | 31 | 106 | 662 | 128 | 86 | 162 | 52 | 27 | 5.8 | 1.6 | .7 |
| 16 | 18 | 31 | 106 | 662 | 113 | 86 | 144 | 52 | 21 | 5.8 | 1.6 | .7 |
| 17 | 18 | 31 | 79 | 530 | 113 | 86 | 144 | 52 | 21 | 5.8 | 1.6 | 5.8 |
| 18 | 18 | 31 | 79 | 385 | 113 | 86 | 144 | 52 | 21 | 5.8 | 1.6 | 5.8 |
| 19 | 18 | 26 | 79 | 342 | 113 | 86 | 128 | 52 | 21 | 4.8 | 1.6 | 5.3 |
| 20 | 18 | 26 | 79 | 321 | 113 | 530 | 128 | 52 | 21 | 4.8 | 1.6 | 5.3 |
| 21 | 18 | 26 | 79 | 279 | 100 | 1,780 | 128 | 52 | 21 | 4.4 | 1.6 | 4.8 |
| 22 | 18 | 26 | 79 | 258 | 100 | 1,700 | 113 | 42 | 21 | 3.5 | 1.6 | 4.8 |
| 23 | 18 | 26 | 68 | 217 | 128 | 985 | 113 | 42 | 21 | 3.5 | 1.6 | 4.4 |
| 24 | 18 | 26 | 68 | 830 | 113 | 662 | 113 | 42 | 15 | 3.3 | 1.6 | 4.4 |
| 25 | 18 | 31 | 58 | 580 | 113 | 506 | 100 | 42 | 15 | 3.3 | 1.5 | 4.4 |
| 26 | 18 | 31 | 58 | 480 | 113 | 430 | 100 | 42 | 15 | 3.3 | 1.4 | 4.4 |
| 27 | 18 | 31 | 58 | 385 | 100 | 920 | 100 | 34 | 15 | 3.2 | 1.4 | 4.4 |
| 28 | 18 | 31 | 58 | 321 | 100 | 635 | 100 | 34 | 12 | 3.2 | 1.3 | 4.4 |
| 29 | 18 | 31 | 58 | 300 | ...... | 530 | 86 | 34 | 12 | 2.8 | 1.2 | 4.4 |
| 30 | 22 | 31 | 58 | 258 | ...... | 480 | 86 | 34 | 12 | 2.6 | 1.2 | 4.4 |
| 31 | 22 | ...... | 79 | 258 | ...... | 430 | ...... | 34 | ...... | 2.6 | 1.2 | ...... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 3.5 | 8 | 21 | 26 | 2,360 | 662 | 446 | 196 | 98 | 46 | 16 | 12 |
| 2 | 3.5 | 12 | 21 | 26 | 1,620 | 685 | 432 | 191 | 96 | 45 | 15 | 12 |
| 3 | 3.5 | 12 | 21 | 26 | 1,420 | 4,460 | 415 | 186 | 95 | 44 | 16 | 12 |
| 4 | 3.5 | 12 | 27 | 26 | 1,180 | 2,530 | 380 | 184 | 93 | 40 | 17 | 12 |
| 5 | 3.5 | 12 | 27 | 26 | 985 | 4,350 | 422 | 184 | 87 | 39 | 17 | 12 |
| 6 | 3.5 | 12 | 27 | 26 | 860 | 10,000 | 490 | 178 | 84 | 37 | 17 | 12 |
| 7 | 3.5 | 12 | 21 | 26 | 712 | 13,300 | 422 | 174 | 84 | 37 | 17 | 12 |
| 8 | 3.5 | 12 | 21 | 26 | 635 | 6,970 | 415 | 169 | 80 | 35 | 17 | 12 |
| 9 | 3.5 | 12 | 21 | 64 | 580 | 3,980 | 380 | 164 | 80 | 33 | 16 | 12 |
| 10 | 3.5 | 12 | 27 | 300 | 530 | 3,120 | 362 | 160 | 78 | 32 | 16 | 12 |
| 11 | 4.4 | 15 | 27 | 113 | 770 | 2,280 | 352 | 155 | 75 | 31 | 16 | 12 |
| 12 | 7.1 | 15 | 34 | 1,900 | 608 | 2,120 | 329 | 153 | 73 | 28 | 16 | 12 |
| 13 | 15 | 15 | 34 | 4,130 | 740 | 1,860 | 319 | 148 | 73 | 28 | 16 | 12 |
| 14 | 15 | 15 | 27 | 4,850 | 712 | 1,670 | 313 | 144 | 73 | 27 | 15 | 11 |
| 15 | 12 | 15 | 27 | 1,860 | 635 | 1,530 | 298 | 141 | 73 | 27 | 15 | 12 |
| 16 | 12 | 15 | 27 | 920 | 580 | 1,400 | 282 | 139 | 73 | 27 | 14 | 12 |
| 17 | 12 | 15 | 27 | 430 | 555 | 1,290 | 282 | 137 | 70 | 27 | 14 | 12 |
| 18 | 8 | 15 | 27 | 385 | 480 | 1,130 | 267 | 130 | 70 | 26 | 14 | 12 |
| 19 | 8 | 15 | 27 | 364 | 455 | 1,070 | 256 | 126 | 67 | 26 | 14 | 12 |
| 20 | 8 | 15 | 27 | 321 | 430 | 1,010 | 252 | 122 | 64 | 26 | 14 | 12 |
| 21 | 8 | 15 | 27 | 346 | 385 | 900 | 252 | 118 | 62 | 25 | 13 | 12 |
| 22 | 8 | 15 | 27 | 300 | 376 | 795 | 246 | 116 | 62 | 25 | 13 | 14 |
| 23 | 8 | 15 | 27 | 258 | 364 | 745 | 229 | 112 | 59 | 23 | 13 | 14 |
| 24 | 8 | 15 | 27 | 1,080 | 351 | 700 | 223 | 110 | 59 | 22 | 13 | 16 |
| 25 | 8 | 21 | 27 | 1,040 | 342 | 632 | 220 | 108 | 57 | 21 | 13 | 16 |
| 26 | 8 | 21 | 27 | 800 | 313 | 610 | 212 | 106 | 56 | 19 | 13 | 16 |
| 27 | 8 | 21 | 27 | 800 | 321 | 570 | 210 | 104 | 54 | 18 | 13 | 16 |
| 28 | 8 | 21 | 27 | 1,100 | 351 | 530 | 210 | 106 | 54 | 18 | 13 | 16 |
| 29 | 8 | 21 | 27 | 5,910 | ...... | 510 | 204 | 108 | 51 | 18 | 12 | 16 |
| 30 | 8 | 21 | 27 | 4,570 | ...... | 498 | 196 | 104 | 46 | 18 | 12 | 16 |
| 31 | 8 | ...... | 27 | 3,920 | ...... | 470 | ...... | 102 | ...... | 17 | 12 | ...... |

*Monthly discharge of Arroya Seco near Soledad, Cal., for 1901–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1901–2.** | | | | | | | |
| ay | 105 | 55 | 74 | 0.34 | 0.39 | 4,550 | |
| ıne | 55 | 15 | 32 | .15 | .17 | 1,904 | |
| ıly | 15 | 7 | 12 | .06 | .07 | 738 | |
| ugust | 7 | 3 | 4 | .02 | .02 | 246 | |
| eptember | 3 | 0 | 0 | .00 | .00 | 0 | |
| The year | 2,860 | 0 | 142 | .66 | 8.76 | 100,000 | |
| **1902–3.** | | | | | | | |
| ctober | 55 | 0 | 9 | .04 | .05 | 553 | |
| ovember | 750 | 11 | 57 | .27 | .30 | 3,392 | |
| ecember | 145 | 25 | 54 | .25 | .29 | 3,320 | |
| anuary | 1,790 | 22 | 205 | .94 | 1.08 | 12,605 | |
| ebruary | 970 | 120 | 313 | 1.44 | 1.50 | 17,383 | |
| larch | 3,080 | 92 | 466 | 2.15 | 2.48 | 28,653 | |
| pril | 3,210 | 120 | 483 | 2.23 | 2.49 | 28,740 | |
| lay | 720 | 56 | 84 | .39 | .45 | 5,165 | |
| ıne | 120 | 32 | 46 | .21 | .23 | 2,737 | |
| ıly | 56 | 13 | 25 | .12 | .14 | 1,537 | |
| ugust | 32 | 6 | 10 | .05 | .06 | 615 | |
| eptember | 6 | 0 | 4 | .02 | .02 | 238 | |
| The year | 3,210 | 0 | 146 | .679 | 9.09 | 106,000 | |
| **1903–4.** | | | | | | | |
| ctober | 22 | 13 | 17 | .08 | .09 | 1,045 | |
| ovember | 120 | 13 | 40 | .18 | .20 | 2,380 | |
| ecember | 44 | 32 | 33 | .15 | .17 | 2,029 | |
| anuary | 30 | 14 | 18 | .08 | .09 | 1,107 | |
| ebruary | 510 | 14 | 181 | .83 | .90 | 10,411 | |
| larch | 1,610 | 48 | 394 | 1.82 | 2.10 | 24,226 | |
| pril | 1,210 | 71 | 214 | .99 | 1.10 | 12,734 | |
| lay | 160 | 30 | 62 | .29 | .33 | 3,812 | |
| une | 30 | 6 | 16 | .07 | .08 | 952 | |
| uly | 6 | 1 | 3 | .01 | .01 | 184 | |
| ugust | 1 | 0 | 0 | .00 | .00 | 0 | |
| eptember | 71 | 0 | 8 | .04 | .04 | 476 | |
| The year | 1,610 | 0 | 82.2 | .382 | 5.11 | 59,400 | |
| **1904–5.** | | | | | | | |
| )ctober | 560 | 6 | 54 | .25 | .29 | 3,320 | |
| Tovember | 24 | 9 | 17 | .08 | .09 | 1,012 | |
| )ecember | 800 | 14 | 42 | .19 | .22 | 2,582 | |
| anuary | 555 | 50 | 160 | .744 | .86 | 9,838 | |
| 'ebruary | 1,595 | 225 | 556 | 2.59 | 2.70 | 30,880 | |
| larch | 2,850 | 125 | 586 | 2.73 | 3.15 | 36,030 | |
| pril | 345 | 140 | 202 | .940 | 1.05 | 12,020 | |
| lay | 1,110 | 110 | 246 | 1.14 | 1.31 | 15,130 | |
| une | 110 | 50 | 75.6 | .352 | .39 | 4,499 | |
| uly | 50 | 15 | 22.8 | .106 | .12 | 1,402 | |
| ugust | 15 | 4 | 8.6 | .040 | .05 | 529 | |
| eptember | 4 | 2 | 2.3 | .011 | .01 | 137 | |
| The year | 2,850 | 2 | 164 | .764 | 10.24 | 117,000 | |
| **1905–6.** | | | | | | | |
| )ctober | 10 | 4 | 6.1 | .028 | .03 | 375 | |
| November | 125 | 10 | 22.4 | .104 | .12 | 1,333 | |
| )ecember | 60 | 30 | 36.5 | .170 | .20 | 2,245 | |
| anuary | 3,300 | 124 | 556 | 2.59 | 2.99 | 34,200 | |
| February | 727 | 94 | 302 | 1.41 | 1.47 | 16,800 | |
| March | 4,480 | 338 | 1,360 | 6.32 | 7.29 | 83,600 | |
| April | 1,580 | 286 | 558 | 2.60 | 2.90 | 33,200 | |
| May | 1,580 | 153 | 297 | 1.38 | 1.59 | 18,300 | |
| June | 320 | 91 | 178 | .828 | .92 | 10,600 | |
| July | 91 | 24 | 50.8 | .236 | .27 | 3,120 | |
| August | 24 | 1 | 17.3 | .080 | .09 | 1,060 | |
| September | 19 | 0 | 7.1 | .033 | .04 | 422 | |
| The year | 4,480 | 0 | 283 | 1.32 | 17.91 | 205,000 | |
| **1906–7.** | | | | | | | |
| October | 19 | 5 | 14.1 | .066 | .08 | 867 | |
| November | 121 | 19 | 31.8 | .148 | .16 | 1,890 | |
| December | 6,260 | 32 | 492 | 2.29 | 2.64 | 30,300 | |

*Monthly discharge of Arroyo Seco near Soledad, Cal., for 1901–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1906-7** | | | | | | | |
| January | 3,220 | 302 | 1,150 | 5.35 | 6.17 | 70,700 | A. |
| February | 1,010 | 355 | 568 | 2.64 | 2.75 | 31,500 | A. |
| March | 5,180 | 320 | 1,910 | 8.88 | 10.24 | 117,000 | A. |
| April | 1,180 | 288 | 520 | 2.46 | 2.74 | 31,500 | A. |
| May | 288 | 118 | 188 | .874 | 1.01 | 11,600 | A. |
| June | 118 | 55 | 94.3 | .439 | .49 | 5,610 | A. |
| July | 55 | 27 | 40.3 | .188 | .21 | 2,480 | B. |
| August | 27 | 11 | 18.3 | .090 | .10 | 1,130 | B. |
| September | 21 | 16 | 18.3 | .090 | .10 | 1,090 | B |
| The year | 6,250 | 5 | 421 | 1.96 | 26.60 | 306,000 | |
| **1907-8.** | | | | | | | |
| October | 183 | 16 | 39.0 | .184 | .21 | 2,400 | B. |
| November | 47 | 33 | 38.1 | .177 | .20 | 2,270 | B. |
| December | 475 | 33 | 99.6 | .463 | .53 | 6,120 | B. |
| January | 1,040 | 64 | 228 | 1.06 | 1.22 | 14,000 | A. |
| February | 2,320 | 150 | 416 | 1.98 | 2.08 | 23,900 | A. |
| March | 320 | 118 | 187 | .870 | 1.00 | 11,500 | A. |
| April | 118 | 47 | 77.3 | .360 | .40 | 4,600 | B. |
| May | 78 | 33 | 46.0 | .214 | .25 | 2,830 | B. |
| June | 33 | 11 | 23.9 | .111 | .12 | 1,420 | B. |
| July | 11 | 1.5 | 4.2 | .020 | .02 | 258 | C. |
| August | 1.5 | .5 | .9 | .0042 | .01 | 55 | D. |
| September | 3 | .0 | .4 | .0018 | .00 | 24 | D. |
| The year | 2,320 | 0 | 98.7 | .450 | 6.04 | 69,400 | |
| **1908-9.** | | | | | | | |
| October | 11 | 3 | 6.2 | .029 | .03 | 381 | C. |
| November | 33 | 11 | 14.7 | .068 | .08 | 875 | B. |
| December | 88 | 21 | 35.2 | .164 | .19 | 2,160 | B. |
| January | 6,150 | 33 | 1,390 | 6.47 | 7.46 | 85,500 | B. |
| February | 5,340 | 505 | 1,590 | 7.40 | 7.71 | 88,300 | B. |
| March | 1,080 | 250 | 444 | 2.07 | 2.39 | 27,300 | B. |
| April | 608 | 178 | 334 | 1.55 | 1.73 | 19,900 | A. |
| May | 178 | 79 | 117 | .544 | .63 | 7,190 | B. |
| June | 79 | 36 | 54.4 | .253 | .28 | 3,240 | B. |
| July | 31 | 18 | 23.7 | .110 | .13 | 1,460 | B. |
| August | 18 | 10 | 13.1 | .061 | .07 | 806 | C. |
| September | 18 | 10 | 10.8 | .050 | .06 | 643 | C. |
| The year | 6,150 | 3 | 336 | 1.56 | 20.76 | 238,000 | |
| **1909-10.** | | | | | | | |
| October | 22 | 15 | 18.3 | .085 | .10 | 1,120 | B. |
| November | 31 | 22 | 27.7 | .129 | .14 | 1,650 | B. |
| December | 2,220 | 31 | 217 | 1.01 | 1.16 | 13,300 | A. |
| January | 1,360 | 100 | 357 | 1.66 | 1.91 | 22,000 | B. |
| February | 238 | 100 | 142 | .660 | .69 | 7,890 | B. |
| March | 1,780 | 74 | 362 | 1.68 | 1.94 | 22,300 | B. |
| April | 385 | 86 | 180 | .837 | .93 | 10,700 | B. |
| May | 86 | 34 | 59.0 | .274 | .32 | 3,630 | B. |
| June | 27 | 12 | 22.3 | .104 | .12 | 1,330 | B. |
| July | 12 | 2.6 | 6.28 | .030 | .03 | 386 | B. |
| August | 2.6 | 1.2 | 1.75 | .0081 | .01 | 108 | B. |
| September | 5.8 | .5 | 2.69 | .013 | .01 | 166 | B. |
| The year | 2,220 | .5 | 116 | .540 | 7.36 | 84,000 | |
| **1910-11.** | | | | | | | |
| October | 15 | 3.5 | 7.24 | .034 | .04 | 445 | B. |
| November | 21 | 8.0 | 15.1 | .070 | .08 | 898 | B. |
| December | 34 | 21 | 26.3 | .122 | .14 | 1,620 | B. |
| January | 5,910 | 26 | 1,160 | 5.40 | 6.23 | 71,300 | B. |
| February | 2,360 | 313 | 702 | 3.27 | 3.40 | 39,000 | B. |
| March | 13,300 | 470 | 2,330 | 10.8 | 12.45 | 143,000 | B. |
| April | 490 | 196 | 310 | 1.44 | 1.61 | 18,400 | B. |
| May | 196 | 102 | 141 | .656 | .76 | 8,670 | B. |
| June | 98 | 46 | 71.5 | .333 | .37 | 4,250 | B. |
| July | 46 | 17 | 28.5 | .133 | .15 | 1,750 | B. |
| August | 17 | 12 | 14.6 | .068 | .08 | 898 | C. |
| September | 16 | 11 | 13.0 | .060 | .07 | 774 | C. |
| The year | 13,300 | 3.5 | 402 | 1.87 | 25.38 | 291,000 | |

*Monthly discharge of Arroyo Seco near Soledad, Cal., for 1901-1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| 1911-12. | | | | | | | |
| October | 17 | 15 | 16.1 | 0.075 | 0.09 | 990 | C. |
| November | 39 | 18 | 22.7 | .106 | .12 | 1,350 | B. |
| December | 70 | 23 | 33.9 | .158 | .18 | 2,080 | B. |
| January | 171 | 39 | 67.0 | .312 | .36 | 4,120 | B. |
| February | 62 | 29 | 37.3 | .174 | .19 | 2,150 | B. |
| March | 1,080 | 31 | 173 | .805 | .93 | 10,600 | B. |
| April | 458 | 48 | 142 | .660 | .74 | 8,450 | B. |
| May | 210 | 41 | 70.7 | .329 | .38 | 4,350 | B. |
| June | 57 | 24 | 34.1 | .159 | .18 | 2,030 | B. |
| The period | | | | | | 36,100 | |

MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the Salinas River basin:

*Miscellaneous measurements in Salinas River drainage basin.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| 1901. | | | | *Sec.-ft.* |
| Feb. 14 | Salinas River | S. G. Bennett | Bridge, Bradley | 1,420 |
| Apr. 17 | San Antonio Creek | J. B. Lippincott | Los Ojitos dam | 50 |
| 17 | .....do | .....do | Pinkerton dam site | 37 |
| 4 | Burnett Creek | W. W. Cockins, jr. | | 21 |
| Feb. 15 | Nacimiento Creek | S. G. Bennett | 4 miles above mouth | 527 |
| 1900. | | | | |
| June 20 | Arroyo Seco | D. A. Porter | First pool above entrance of Santa Lucia. | 11.8 |
| 20 | .....do | .....do | Between second and third pools above entrance of Santa Lucia. | 12.4 |
| 21 | .....do | .....do | Road crossing between Moor's and Abbott's houses. | 10.4 |
| 21 | .....do | .....do | 200 feet above Currier's dam site. | 7.30 |
| 21 | .....do | .....do | 50 feet below head gate of Salina Valley Water Co.'s ditch No. 2. Canal was taking all of creek. | 6.14 |
| 1901. | | | | |
| Feb. 11 | Arroyo Seco | S. G. Bennett | Point near Foster's | 535 |
| Mar. 26 | .....do | W. W. Cockins, jr. | .....do | 162 |
| Apr. 2 | .....do | .....do | Pettitt's ranch | 105 |
| Sept. 24 | .....do | Homer Hamlin | .....do | 7.9 |
| 1911. | | | | |
| Sept. 14 | Carmel River | | ½ mile above mouth, near Monterey. | [a] 3 |
| 10 | Salinas River | | Wagon bridge at San Miguel | [a] 1 |
| 11 | .....do | | Wagon bridge at Bradley | [a] 2 |
| 10 | Estrello Creek | | Mouth, near San Miguel | ([b]) |
| 11 | San Antonio River | | 1½ miles above mouth, near Bradley. | ([b]) |
| 12 | San Lorenzo River | | Mathews's dam site, 5 miles east of King City. | 9.1 |

[a] Estimated. [b] Dry.

## [illegible] VILLE, CAL.

[illegible] railway bridge at V[illegible] [illegible] San Benito River and [illegible] established September [illegible]

[illegible] from the right and [illegible] considerab[illegible] [illegible] known [illegible]

[illegible]

| | | | | | | |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 2.7 | [illegible] | [illegible] | [illegible] | [illegible] | 2.82 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.82 | 2.4[illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.32 | 2.8[illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.8[illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 2.1[illegible] | [illegible] | 2.8[illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.3[illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.25 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 2.4[illegible] | ..... | 2.[illegible] | ...... | [illegible] | [illegible] |

*Daily discharge, in second-feet, of Pajaro River at Watsonville, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | ........ | 17 | 34 | 38 | 49 | 48 | 36 | 28 | 37 | 6 |
| 2 | ........ | 25 | 34 | 40 | 46 | 52 | 34 | 27 | 30 | 5.6 |
| 3 | ........ | 19 | 31 | 40 | 46 | 48 | 33 | 33 | 26 | 5.3 |
| 4 | ........ | 17 | 31 | 43 | 43 | 45 | 34 | 28 | 22 | 4.6 |
| 5 | ........ | 17 | 31 | 34 | 43 | 45 | 38 | 27 | 21 | 4.6 |
| 6 | ........ | 17 | 31 | 38 | 43 | 45 | 80 | 27 | 19 | 4.2 |
| 7 | ........ | 15 | 31 | 34 | 65 | 45 | 60 | 28 | 21 | 4.2 |
| 8 | ........ | 19 | 34 | 34 | 74 | 45 | 52 | 27 | 21 | 3.9 |
| 9 | ........ | 8 | 34 | 31 | 70 | 44 | 45 | 35 | 20 | 3.2 |
| 10 | ........ | 9 | 43 | 31 | 68 | 42 | 38 | 38 | 18 | 3.2 |
| 11 | ........ | 11 | 46 | 34 | 65 | 42 | 34 | 524 | 17 | 3.2 |
| 12 | ........ | 17 | 43 | 38 | 58 | 42 | 227 | 405 | 15 | 2.5 |
| 13 | ........ | 19 | 38 | 34 | 50 | 38 | 440 | 170 | 15 | 2.5 |
| 14 | 13 | 21 | 31 | 31 | 54 | 42 | 230 | 115 | 14 | 2.5 |
| 15 | 15 | 19 | 29 | 34 | 55 | 38 | 140 | 102 | 10 | 2.5 |
| 16 | 13 | 21 | 17 | 38 | 67 | 38 | 138 | 74 | 9 | 2.5 |
| 17 | 13 | 19 | 37 | 46 | 75 | 38 | 125 | 66 | 8 | 2.5 |
| 18 | 13 | 19 | 38 | 38 | 80 | 39 | 115 | 55 | 8 | 2.4 |
| 19 | 14 | 17 | 37 | 38 | 74 | 38 | 90 | 48 | 8 | 2.4 |
| 20 | 15 | 17 | 29 | 34 | 68 | 38 | 80 | 40 | 10 | 2.2 |
| 21 | 15 | 17 | 29 | 31 | 72 | 33 | 67 | 36 | 11 | 2.2 |
| 22 | 17 | 16 | 31 | 34 | 75 | 30 | 58 | 34 | 46 | 2.2 |
| 23 | 17 | 17 | 31 | 31 | 73 | 33 | 52 | 30 | 30 | 2.2 |
| 24 | 17 | 21 | 31 | 31 | 69 | 30 | 48 | 28 | 10 | 2.2 |
| 25 | 18 | 25 | 31 | 31 | 64 | 42 | 40 | 28 | 26 | 2.2 |
| 26 | 19 | 38 | 34 | 31 | 60 | 42 | 40 | 28 | 12 | 2.4 |
| 27 | 19 | 19 | 38 | 34 | 70 | 39 | 40 | 28 | 11 | 2.2 |
| 28 | 15 | 21 | 38 | 38 | 78 | 39 | 38 | 28 | 9 | 2.2 |
| 29 | 19 | 26 | 38 | 46 | 72 | 38 | 35 | 38 | 8 | 2.2 |
| 30 | 17 | 31 | 38 | 49 | 58 | ........ | 32 | 50 | 7 | 1.9 |
| 31 | ........ | 31 | ........ | 49 | 56 | ........ | 30 | ........ | 6 | ........ |

NOTE.—Daily discharge determined from rating curves covering short periods of time and by the indirect method of shifting channels.

*Monthly discharge of Pajaro River at Watsonville, Cal., for 1911-12.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| 1911. | | | | | |
| September 14-30 | 19 | 13 | 15.8 | 533 | C. |
| 1911-12. | | | | | |
| October | 38 | 8 | 19.5 | 1,200 | C. |
| November | 46 | 17 | 33.9 | 2,020 | C. |
| December | 49 | 31 | 36.5 | 2,240 | C. |
| January | 80 | 43 | 62.8 | 3,860 | B. |
| February | 52 | 30 | 40.6 | 2,340 | B. |
| March | 440 | 30 | 82.5 | 5,070 | A. |
| April | 524 | 27 | 74.0 | 4,400 | A. |
| May | 46 | 6 | 16.9 | 1,040 | A. |
| June | 6 | 1.9 | 3.06 | 182 | B. |
| The period | .......... | .......... | .......... | 22,400 | |

## MISCELLANEOUS MEASUREMENTS IN SAN MATEO AND SAN BENITO COUNTIES.

The following miscellaneous discharge measurements have been made on streams in San Benito and San Mateo counties:

*Miscellaneous measurements of streams in San Benito County.*

| Date. | Stream. | Hydrographers. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Dec. 13, 1904.. | San Benito River....... | Clapp and Songer ....... | 7 miles above Hollister.... | 1.6 |

*Miscellaneous measurements of streams in San Mateo County.*

| Date. | Stream. | Hydrographer. | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Oct. 17, 1898.. | Arroyo Leon............ | W. W. Brier............ | ½ mile above Halfmoon Bay. | 0.63 |
| Do....... | Butano Creek.............. | ....do.................. | 5 miles above junction with Pescadero Creek. | 2.06 |
| Do....... | Gasos Creek.............. | ....do.................. | 6 miles above mouth....... | 1.55 |
| Do....... | Lobitos Creek .............. | ....do.................. | 1 mile above mouth....... | .18 |
| Do....... | Pescadero Creek.............. | ....do.................. | 6 miles above Pescadero... | 4.67 |
| Do....... | Pilarcitos Creek.............. | ....do.................. | 3½ miles above Halfmoon Bay. | .90 |
| Do....... | Pomponio Creek.............. | ....do.................. | 2 miles above mouth....... | .27 |
| Do....... | Purisima Creek.............. | ....do.................. | 1½ miles above Purisima.. | 2.03 |
| Do....... | San Gregorio Creek.............. | ....do.................. | ½ mile above San Gregorio.. | 6.49 |
| Do....... | Tunitas Creek.............. | ....do.................. | Mouth.................. | 1.14 |

## MINOR SAN FRANCISCO BAY DRAINAGE BASINS.

### ALAMEDA CREEK IN ALAMEDA COUNTY, CAL.

Estimates of discharge for 1889–1900 for Alameda Creek at Niles dam have been published in Water-Supply Paper 81. These estimates were computed by engineers of the United States Geological Survey from gage-height records presented as Exhibit 11 in a suit entitled "Clough *v.* Spring Valley Water Co. of San Francisco," tried in the Alameda County superior court in the fall of 1901.

Since the proof of this report has been received the attention of the Survey has been called to the fact that the published estimates do not agree with estimates made by others. On investigation it was found that the base data used were incorrect and that the flood discharge was much greater than the published estimates. Lack of time before this report goes to press renders it impossible to revise these estimates and they are therefore omitted from this report.

## MISCELLANEOUS MEASUREMENTS.

*Miscellaneous measurements in San Francisco Bay drainage basins in 1910.*

| Date. | Stream. | Tributary to— | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| June 3, 1910 | Sonoma Creek | San Pablo Bay | Wading at bridge, ½ mile north of Eldredge, Cal. | 4.8 |
| July 9, 1910 | do | do | do | 5.6 |
| Aug. 16, 1910 | do | do | do | .9 |
| June 3, 1910 | do | do | Wading 200 feet above bridge, 1½ miles south of Sonoma, Cal. | 5.9 |
| July 9, 1910 | do | do | do | 2.4 |
| Aug. 16, 1910 | do | do | do | 7.4 |
| June 3, 1910 | Arroyo Seco | Sonoma Creek | Wading 50 feet above bridge, 2½ miles south of Sonoma, Cal. | .2 |
| May 24, 1910 | Napa River | San Pablo Bay | Wading under bridge at Calistoga, Cal. | 2.0 |
| July 12, 1910 | do | do | do | .3 |
| Aug. 13, 1910 | do | do | do | .1 |
| May 26, 1910 | do | do | Wading 100 feet below bridge on road from Bale railroad station, 4 miles north of St. Helena, Cal. | 5.1 |
| July 13, 1910 | do | do | do | 1.5 |
| Aug. 14, 1910 | do | do | do | .4 |
| May 26, 1910 | do | do | Wading 75 feet below bridge, 1 mile northeast of Helena, Cal. | 5.5 |
| July 13, 1910 | do | do | do | 1.4 |
| Aug. 14, 1910 | do | do | do | .4 |
| May 27, 1910 | do | do | Wading at bridge, 1 mile east of Rutherford, Cal. | 11. |
| July 13, 1910 | do | do | do | 2.7 |
| Aug. 14, 1910 | do | do | do | 1.4 |
| Aug. 28, 1911 | do | do | Wading 600 feet below second bridge, 6 miles northwest of Napa, Cal. | 2.7 |
| May 26, 1910 | Lyman Creek | Napa River | Wading 30 feet below bridge, 3 miles north of St. Helena, Cal. | .7 |
| July 13, 1910 | do | do | do | .4 |
| Aug. 14, 1910 | do | do | do | .2 |
| May 26, 1910 | Bell Creek | do | Wading 150 feet below bridge, 2 miles north of St. Helena, Cal. | .6 |
| May 27, 1910 | Conn Creek | do | Wading 75 feet below bridge on Skellenger ranch, 3 miles southeast of Rutherford, Cal. | .3 |
| July 13, 1910 | do | do | do | 0 |
| May 27, 1910 | Rector Creek | Conn Creek | Wading 200 feet above Frey dam, 3 miles northeast of Yountvills, Cal. | 1.3 |
| July 13, 1910 | do | do | do | .6 |
| Aug. 15, 1910 | do | do | do | .7 |
| May 28, 1910 | Dry Creek | Napa River | Wading 1,000 feet above second dam, 2 miles west of Oak Knoll, Cal. | 4.0 |
| July 14, 1910 | do | do | do | .2 |
| Aug. 15, 1910 | do | do | do | .0 |
| May 28, 1910 | do | do | Wading 300 feet below bridge, ½ mile south of Trubody, Cal. | .2 |
| June 2, 1910 | Milliken Creek | do | Wading at bridge, 4 miles northeast of Napa, Cal. | .3 |
| July 14, 1910 | do | do | do | .2 |
| May 28, 1910 | do | do | Wading 600 feet below bridge, 2½ miles northeast of Napa, Cal. | .5 |
| July 14, 1910 | do | do | do | .1 |
| Aug. 15, 1910 | do | do | do | .1 |
| May 28, 1910 | North Branch of Napa Creek. | do | Wading 300 feet above stone bridge, 3 miles west of Napa, Cal. | 1.0 |
| July 14, 1910 | do | do | do | .0 |

NOTE.—These measurements were made by U. S. Department of Agriculture, Irrigation Investigations.

## [illegible] PACIFIC COAST [illegible]

## RUSSIAN RIVER BASIN

### [illegible], CAL.

This station, which is located at Bailey's bridge [illegible] the Yoka[illegible] just above the junction with the East Fork, [illegible] miles [illegible] [illegible] was established August [illegible] 191[illegible].

The gage is [illegible] on the left [illegible] of the bridge [illegible] vertical staff for low water. The channel is composed of sand and gravel, and may shift slightly at high stages. Discharge measurements are made from the bridge or by wading.

*Discharge measurements of [illegible] near [illegible], Cal., [illegible] 191[illegible]–1[illegible].*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*a* [illegible]

*Daily gage height, in feet, of [illegible] near [illegible], Cal., for 191[illegible]–1[illegible].*

| Day. | [illegible] | [illegible] | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| | | | 1911. | | | 1911. | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Russian River near Ukiah, Cal., for 1911-12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 2.95 | 3.14 | 3.16 | 4.22 | 4.12 | 3.90 | 4.02 | 7.2 | 3.75 |
| 2 | 3.00 | 3.10 | 3.20 | 3.88 | 4.10 | 3.90 | 3.95 | 6.15 | 3.70 |
| 3 | 2.96 | 3.10 | 3.30 | 3.62 | 3.92 | 3.82 | 3.90 | 5.35 | 3.70 |
| 4 | 2.96 | 3.10 | 3.30 | 3.55 | 3.90 | 3.85 | 3.85 | 4.95 | 3.70 |
| 5 | 2.97 | 3.11 | 3.30 | 3.51 | 3.90 | 4.00 | 3.88 | 4.70 | 3.68 |
| 6 | 2.96 | 3.11 | 3.32 | 3.50 | 3.80 | 5.55 | 3.88 | 4.60 | 3.65 |
| 7 | 2.97 | 3.11 | 3.32 | 3.52 | 4.20 | 5.15 | 3.90 | 4.50 | 3.60 |
| 8 | 2.96 | 3.11 | 3.35 | 3.56 | 4.20 | 4.80 | 3.90 | 4.40 | 3.60 |
| 9 | 2.98 | 3.12 | 3.38 | 4.22 | 4.15 | 4.60 | 3.90 | 4.30 | 3.60 |
| 10 | 2.98 | 3.14 | 3.38 | 3.98 | 4.12 | 4.50 | 3.90 | 4.25 | 3.60 |
| 11 | 2.97 | 3.14 | 3.38 | 3.90 | 4.05 | 4.50 | 4.75 | 4.10 | 3.60 |
| 12 | 2.97 | 3.14 | 3.38 | 3.86 | 4.00 | 7.5 | 4.65 | 4.05 | 3.60 |
| 13 | 2.98 | 3.14 | 3.38 | 4.05 | 4.22 | 8.1 | 4.35 | 4.00 | 3.60 |
| 14 | 2.98 | 3.14 | 3.38 | 4.02 | 4.65 | 6.2 | 4.22 | 3.90 | 3.58 |
| 15 | 2.98 | 3.14 | 3.40 | 4.05 | 4.50 | 8.0 | 4.05 | 3.90 | 3.58 |
| 16 | 2.98 | 3.14 | 3.40 | 4.18 | 4.50 | 7.0 | 4.00 | 3.95 | 3.58 |
| 17 | 3.02 | 3.16 | 3.45 | 4.04 | 5.25 | 5.9 | 4.00 | 3.90 | 3.58 |
| 18 | 3.01 | 3.16 | 3.45 | 4.39 | 5.95 | 5.55 | 3.92 | 3.80 | 3.58 |
| 19 | 3.04 | 3.16 | 3.40 | 4.24 | 5.0 | 5.05 | 3.90 | 3.80 | 3.55 |
| 20 | 3.04 | 3.16 | 3.40 | 3.95 | 4.70 | 4.85 | 3.85 | 4.00 | 3.50 |
| 21 | 3.04 | 3.20 | 3.38 | 3.90 | 4.50 | 4.80 | 3.85 | 3.90 | 3.50 |
| 22 | 3.01 | 3.20 | 3.38 | 3.85 | 4.35 | 4.70 | 3.80 | 3.90 | 3.50 |
| 23 | 3.04 | 3.20 | 3.38 | 3.80 | 4.20 | 4.65 | 3.80 | 3.90 | 3.50 |
| 24 | 3.04 | 3.20 | 3.38 | 3.88 | 4.05 | 4.45 | 3.80 | 3.90 | 3.50 |
| 25 | 3.04 | 3.20 | 3.38 | 9.4 | 4.10 | 4.35 | 3.75 | 3.90 | 3.50 |
| 26 | 3.04 | 3.20 | 3.38 | 7.7 | 4.00 | 4.32 | 3.75 | 3.90 | 3.52 |
| 27 | 3.04 | 3.18 | 3.51 | 6.05 | 4.00 | 4.25 | 3.80 | 4.00 | 3.52 |
| 28 | 3.04 | 3.18 | 3.78 | 5.05 | 3.95 | 4.12 | 3.80 | 4.00 | 3.50 |
| 29 | 3.04 | 3.18 | 3.70 | 4.55 | 3.90 | 4.10 | 5.85 | 3.90 | 3.50 |
| 30 | 3.04 | 3.16 | 3.55 | 4.45 | ........ | 4.05 | 5.65 | 3.80 | 3.50 |
| 31 | 3.04 | ........ | 3.75 | 4.32 | ........ | 4.05 | ........ | 3.80 | ........ |

NOTE.—Mar. 15, 1912, maximum recorded stage, 11.8 feet at 1 p. m.

## RUSSIAN RIVER AT GEYSERVILLE, CAL.

This station, which is located at the highway bridge on the Tzabaco Spanish land grant, half a mile northeast of Geyserville, was established December 5, 1910.

As water is diverted from the South Eel to the East Fork of Russian River for power development at Potter Valley, the record at this station does not show the natural run-off from the basin, but indicates the amount of water available for irrigation.

The gage is painted on the lower caisson of the sixth pier from the right end of the bridge.

The channel is composed of gravel and shifts slightly at high stages. There is an overflow section on the left bank.

Discharge measurements are made from the highway bridge or by wading.

*Discharge measurements of Russian River at Geyserville, Cal., 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-ft.* | 1911. | | *Feet.* | *Sec.-ft.* |
| Dec. 4 | W. V. Hardy | 10.04 | 354 | Oct. 29 | E. O. Christiansen | 8.63 | 10 |
| | | | | Nov. 24 | Stanley and Whipple | 8.85 | 40 |
| 1911. | | | | | | | |
| Mar. 4 | J. E. Stewart | 11.00 | 2,680 | 1912. | | | |
| June 24 | E. A. Ingham | 9.40 | 213 | Jan. 28 | R. C. Rice | 10.69 | 2,000 |
| July 22 | ....do | 8.95 | 52 | Mar. 5 | ....do | 9.86 | 503 |
| Aug. 18 | E. O. Christiansen | 8.62 | [a]2 | Apr. 6 | ....do | 9.95 | 501 |

[a] Estimated.

[illegible]

[illegible]

## EAST FORK OF RUSSIAN RIVER NEAR UKIAH, CAL.

This station, which is located at the suspension footbridge in the Yokayo grant, about three-fourths of a mile above the junction with Russian River and 3 miles northeast of Ukiah, was established August 19, 1911.

The Snow Mountain Water & Power Co. diverts water from the South Eel for use in power development. This water enters the East Fork of Russian River about 14 miles above the station. At low stages regulation at the power plant of the Snow Mountain Water & Power Co. causes a noticeable fluctuation in the discharge. The daily load fluctuates greatly and hence the low-water gage heights are liable to considerable error.

The gage is a vertical staff in two sections on the left bank, about 40 feet below the bridge. The channel is composed of sand and gravel and shifts during high stages. Discharge measurements are made from the footbridge or by wading.

*Discharge measurements of East Fork of Russian River near Ukiah Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Aug. 19 | E. O. Christiansen | 4.80 | [a]2.0 | Mar. 6 | R. C. Rice | 7.07 | 610 |
| Nov. 1 | .....do | 4.69 | 4.9 | Mar. 16 | .....do | 7.27 | 933 |
| 20 | Whipple and Stanley | 5.04 | 22. | 28 | .....do | 6.18 | 284 |
| 1912. | | | | Apr. 5 | .....do | 6.20 | 286 |
| Jan. 27 | R. C. Rice | 6.69 | 373 | | | | |

[a] Estimated.

*Daily gage height, in feet, of East Fork of Russian River near Ukiah, Cal., for 1911-12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | | 4.70 | 11 | | 5.25 | 21 | 4.90 | 4.90 |
| 2 | | 4.85 | 12 | | 5.25 | 22 | 5.30 | 4.75 |
| 3 | | 4.70 | 13 | | 5.10 | 23 | 5.20 | 4.90 |
| 5 | | 5.02 | 14 | | 5.15 | 24 | 4.90 | 5.00 |
| 5 | | 4.95 | 15 | | 4.99 | 25 | 4.20 | 5.00 |
| 6 | | 4.52 | 16 | | 5.08 | 26 | 4.78 | 4.85 |
| 7 | | 5.00 | 17 | | 4.90 | 27 | 5.09 | 5.00 |
| 8 | | 4.85 | 18 | | 4.95 | 28 | 4.90 | 4.90 |
| 9 | | 4.85 | 19 | 4.70 | 5.00 | 29 | 5.00 | 4.95 |
| 10 | | 4.90 | 20 | 4.90 | 4.95 | 30 | 4.70 | 5.10 |
| | | | | | | 31 | 4.65 | |

[illegible]

| Day. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

Note.—[illegible]

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the Russian River basin:

*Miscellaneous measurements in Russian River drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | Sec.-ft. |
| Sept. [illegible], 1906 | Russian River | Near Calpella | [illegible] |
| Aug. [illegible] | do | [illegible] north of Calpella | [illegible] |
| Sept. [illegible], 1906 | do | Near [illegible] | [illegible] |
| May 3, [illegible] | do | [illegible] mile east of Ukiah | [illegible] |
| May 2[illegible] | do | do | [illegible] |
| May [illegible] | do | [illegible] feet above mouth of East Fork | [illegible] |
| July [illegible] | do | [illegible] feet above mouth of East Fork | [illegible] |
| Aug. 8, [illegible] | do | Below bridge [illegible] miles southeast of Ukiah | [illegible] |
| May [illegible] | do | Below bridge [illegible] mile west of Hopland | [illegible] |
| May [illegible] | do | [illegible] mile north of Cloverdale | [illegible] |
| Aug. [illegible] | do | At bridge at Cloverdale | [illegible] |
| Aug. 2[illegible] | do | [illegible] miles north of Healdsburg | [illegible] |
| Jan. [illegible] | do | At Healdsburg | [illegible] |
| May [illegible] | do | do | [illegible] |
| Sept. [illegible] | East Fork of Russian River | Near Ukiah | [illegible] |
| May [illegible] | do | Near mouth, [illegible] miles north of Ukiah | [illegible] |
| July [illegible] | do | do | [illegible] |
| Aug. [illegible] | do | do | [illegible] |
| Nov. [illegible] | [illegible] Creek | Near mouth, about [illegible] miles north of Ukiah | [illegible] |
| Do | [illegible] Creek | Near mouth, about [illegible] mile north of Ukiah | [illegible] |
| [illegible] | [illegible] Creek | Near mouth, about [illegible] mile south of [illegible] | [illegible] |
| May [illegible] | Kellogg Creek | 100 feet below mouth of Yellowjacket Creek at Kellogg | [illegible] |
| July 2, 1910 | do | do | [illegible] |
| May [illegible] | Yellowjacket Creek | [illegible] mile east of Kellogg | [illegible] |
| Aug. [illegible] | do | do | [illegible] |
| Do | Mill Creek | [illegible] mile above mouth, 1 mile north of Kellogg | [illegible] |

## MATTOLE RIVER BASIN.

### MATTOLE RIVER NEAR PETROLIA, CAL.

This station, which is located at the highway bridge in the SW. ¼ sec. 11, T. 2 S., R. 2 W., about 2 miles southeast of Petrolia, was established November 21, 1911.

The gage is painted on the left pier of the highway bridge. The channel is composed of sand and gravel and will probably shift during high water. The area drained is 264 square miles. Discharge measurements are made from the bridge or by wading.

*Discharge measurements of Mattole River near Petrolia, Cal., 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-feet.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Nov. 21 | E. O. Christiansen | 5.70 | 114 | Mar. 21 | E. O. Christiansen | 8.40 | 1,990 |
| | | | | May 23 | do | 7.97 | 1,650 |
| 1912. | | | | 25 | do | 7.80 | 1,250 |
| Jan. 13 | E. O. Christiansen | 9.60 | 4,570 | 25 | do | 7.78 | 1,240 |
| 14 | do | 8.92 | 2,780 | | | | |

*Daily gage height, in feet, of Mattole River near Petrolia, Cal., for 1911-12.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | |
| 1 | | 5.38 | 7.75 | 8.8 | 7.55 | 7.3 | 12.0 | 7.4 |
| 2 | | 5.35 | 7.4 | 8.6 | 7.45 | 7.25 | 10.3 | 7.4 |
| 3 | | 5.35 | 7.1 | 8.35 | 7.4 | 7.2 | 9.3 | 7.3 |
| 4 | | 5.35 | 6.9 | 8.25 | 7.35 | 7.15 | 8.8 | 7.2 |
| 5 | | 5.54 | 6.8 | 8.2 | 7.7 | 7.1 | 8.45 | 7.15 |
| 6 | | 7.32 | 6.75 | 8.1 | 8.4 | 7.05 | 8.25 | 7.1 |
| 7 | | 6.88 | 7.35 | 8.6 | 9.4 | 7.05 | 8.0 | 7.05 |
| 8 | | 6.39 | 7.3 | 9.45 | 8.85 | 7.0 | 7.85 | 7.0 |
| 9 | | 6.12 | 8.3 | 9.6 | 8.55 | 7.0 | 7.75 | 6.95 |
| 10 | | 5.98 | 8.45 | 10.0 | 8.25 | 7.0 | 7.6 | 6.9 |
| 11 | | 5.88 | 8.6 | 9.6 | 8.0 | 7.05 | 7.5 | 6.9 |
| 12 | | 5.79 | 8.5 | 9.05 | 8.3 | 7.1 | 7.45 | 6.95 |
| 13 | | 5.74 | 9.8 | 9.3 | 8.0 | 7.0 | 7.35 | 7.0 |
| 14 | | 5.69 | 8.95 | 9.1 | 7.85 | 6.95 | 7.25 | 7.05 |
| 15 | | 5.64 | 8.45 | 8.95 | 10.7 | 6.9 | 7.2 | 7.0 |
| 16 | | 5.61 | 8.05 | 9.7 | 10.6 | 6.85 | 7.15 | 6.95 |
| 17 | | 5.75 | 7.75 | 11.2 | 9.8 | 6.85 | 7.15 | 6.9 |
| 18 | | 5.54 | 7.8 | 10.7 | 9.5 | 6.85 | 7.1 | 6.85 |
| 19 | | 5.28 | 8.25 | 9.7 | 9.05 | 6.8 | 7.1 | 6.8 |
| 20 | | 6.15 | 7.96 | 9.1 | 8.65 | 6.8 | 7.5 | 6.8 |
| 21 | 5.70 | 6.04 | 7.85 | 8.8 | 8.35 | 6.8 | 7.4 | 6.75 |
| 22 | 5.65 | 5.94 | 7.95 | 8.5 | 8.25 | 6.8 | 7.5 | 6.75 |
| 23 | 5.60 | 6.04 | 7.75 | 8.35 | 8.15 | 6.8 | 8.2 | 6.8 |
| 24 | 5.54 | 6.02 | 12.9 | 8.15 | 8.05 | 6.9 | 7.9 | 6.8 |
| 25 | 5.50 | 5.48 | 25.2 | 8.0 | 7.85 | 6.9 | 7.8 | 6.75 |
| 26 | 5.49 | 5.89 | 17.0 | 8.0 | 7.7 | 6.85 | 8.1 | 6.75 |
| 27 | 5.44 | 7.20 | 12.1 | 7.75 | 7.6 | 6.9 | 8.2 | 6.7 |
| 28 | 5.42 | 7.98 | 10.5 | 7.7 | 7.5 | 7.05 | 7.95 | 6.7 |
| 29 | 5.40 | 7.36 | 9.6 | 7.65 | 7.35 | 11.0 | 7.8 | 6.7 |
| 30 | 5.40 | 7.09 | 9.25 | | 7.35 | 12.0 | 7.6 | 6.7 |
| 31 | | 7.58 | 8.9 | | 7.35 | | 7.5 | |

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the Mattole River basin:

*Miscellaneous measurements in Mattole River drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| Nov. [illegible], 1911 | Lower Dew Creek | Mouth, sec. [illegible], T. [illegible] S., R. [illegible] | [illegible] |
| Jan. [illegible], 1912 | do. | Above Upper Mattole, NW. [illegible] sec. [illegible], T. [illegible], R. [illegible] E. | [illegible] |
| May 8, 1912 | do. | do. | [illegible] |
| Nov. [illegible], 1911 | [illegible] Creek | Mouth, sec. 10, T. [illegible] S., R. [illegible] W. | |
| May [illegible], 1912 | do. | do. | [illegible] |
| May [illegible], 1912 | [illegible] Creek or West Fork | Mouth, at [illegible], NW. [illegible] sec. [illegible], T. [illegible], R. [illegible] E. | [illegible] |
| May [illegible], 1912 | [illegible] Creek | [illegible] miles from Petrolia, NW. [illegible] sec. [illegible], T. [illegible] S., R. [illegible] W. | |
| Nov. 2, 1911 | North Fork of Mattole River | Near mouth, NW. [illegible] sec. [illegible], T. [illegible] S., R. [illegible] W. | |
| May [illegible], 1912 | do. | do. | [illegible] |
| May [illegible], 1912 | do. | do. | [illegible] |

[a] Estimated.

## EEL RIVER BASIN.

### SOUTH EEL RIVER AT HEARST, CAL.

This station, which is located at the highway bridge at Hearst, 300 feet above the mouth of Salt Creek, about 3 miles below the mouth of Sanhedrin Creek, in the NE. ¼ sec. 20, T. 19 N., R. 12 W., was established December 7, 1910.

Water is diverted above the station, and is conducted through a tunnel to the basin of the East Fork of Russian River, where it is used by the Snow Mountain Water & Power Co. for power development.

A staff gage in two sections is bolted to the bedrock on the left bank at the bridge, and a third section is painted on the lower caisson of the bridge at the left end.

Discharge measurements are made from the highway bridge.

No estimates of daily or monthly discharge have been prepared.

*Discharge measurements of South Eel River at Hearst, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910 | | *Feet.* | *Sec.-ft.* | 1912 | | *Feet.* | *Sec.-ft.* |
| Aug. [illegible] | W. [illegible] Hardy | .. | 5.4 | Jan. 30 | R. C. Rice | 10.72 | [illegible] |
| Dec. [illegible] | do. | 4.45 | 44 | Mar. 8 | do. | 11.48 | 1,[illegible] |
| | | | | Apr. 3 | do. | 9.48 | 530 |
| 1911 | | | | 4 | do. | 9.46 | 264 |
| Mar. 3 | [illegible] R. Stewart | 10.29 | 471 | | | | |
| Aug. 10 | R. [illegible] Christiansen | 7.[illegible]0 | 4.5 | | | | |
| Nov. 4 | do. | 7.19 | 4.8 | | | | |
| 10 | Whipple and Stanley | 7.28 | 9.7 | | | | |

*Daily gage height, in feet, of South Eel River at Hearst, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | |
| 1 | ........ | 7.95 | 14.65 | 10.30 | 12.70 | 10.10 | 9.90 | 7.50 | 7.19 | 7.00 |
| 2 | ........ | 7.93 | 14.85 | 10.10 | 12.40 | 10.25 | 9.50 | 7.50 | 7.17 | 7.00 |
| 3 | ........ | 7.90 | 14.35 | 10.30 | 11.80 | 10.30 | 9.40 | 7.49 | 7.16 | 7.00 |
| 4 | ........ | 7.90 | 13.70 | 12.60 | 12.40 | 10.40 | 9.10 | 7.48 | 7.15 | 7.00 |
| 5 | ........ | 7.90 | 13.15 | 15.50 | 16.00 | 10.65 | 9.05 | 7.47 | 7.20 | 7.00 |
| 6 | ........ | 7.88 | 12.90 | 20.30 | 15.00 | 10.30 | 8.90 | 7.42 | 7.19 | 7.00 |
| 7 | ........ | 7.86 | 12.40 | 20.00 | 12.80 | 10.00 | 9.05 | 7.41 | 7.18 | 7.00 |
| 8 | 8.45 | 7.85 | 12.20 | 16.95 | 12.70 | 9.92 | 8.90 | 7.40 | 7.18 | 7.00 |
| 9 | 9.35 | 7.89 | 11.60 | 15.80 | 12.50 | 9.80 | 8.80 | 7.41 | 7.17 | 7.00 |
| 10 | 9.02 | 8.10 | 11.40 | 13.30 | 12.35 | 9.70 | 8.60 | 7.39 | 7.16 | 7.00 |
| 11 | 9.62 | 10.65 | 13.90 | 13.20 | 12.20 | 9.70 | 8.52 | 7.43 | 7.15 | 7.00 |
| 12 | 9.42 | 10.22 | 13.20 | 12.70 | 12.10 | 9.70 | 8.46 | 7.35 | 7.16 | 7.00 |
| 13 | 8.80 | 10.42 | 13.70 | 12.40 | 11.80 | 9.65 | 8.37 | 7.33 | 7.16 | 7.02 |
| 14 | 8.50 | 11.30 | 12.90 | 12.30 | 11.50 | 9.65 | 8.10 | 7.30 | 7.15 | 7.02 |
| 15 | 8.35 | 11.06 | 12.30 | 12.20 | 11.40 | 9.35 | 8.05 | 7.31 | 7.14 | 7.02 |
| 16 | 8.30 | 10.15 | 11.90 | 12.10 | 11.50 | 9.40 | 7.94 | 7.31 | 7.12 | 7.00 |
| 17 | 8.26 | 9.65 | 11.50 | 12.30 | 11.20 | 9.45 | 7.87 | 7.30 | 7.10 | 7.00 |
| 18 | 8.20 | 10.40 | 11.30 | 12.30 | 11.10 | 11.45 | 7.70 | 7.30 | 7.10 | 7.00 |
| 19 | 8.12 | 18.65 | 11.80 | 12.20 | 11.00 | 10.70 | 7.68 | 7.29 | 7.11 | 7.00 |
| 20 | 8.12 | 18.20 | 11.51 | 12.35 | 10.90 | 10.20 | 7.65 | 7.29 | 7.12 | 7.00 |
| 21 | 8.10 | 13.70 | 11.11 | 12.40 | 10.80 | 10.10 | 7.62 | 7.29 | 7.12 | 7.00 |
| 22 | 8.00 | 12.10 | 11.10 | 12.50 | 10.80 | 10.10 | 7.64 | 7.28 | 7.15 | 7.00 |
| 23 | 8.00 | 11.38 | 11.00 | 12.30 | 10.85 | 10.05 | 7.62 | 7.28 | 7.12 | 7.00 |
| 24 | 8.00 | 13.52 | 10.80 | 12.20 | 11.40 | 9.90 | 7.61 | 7.26 | 7.10 | 7.00 |
| 25 | 8.00 | 13.15 | 10.80 | 12.00 | 11.10 | 9.50 | 7.61 | 7.25 | 7.10 | 7.02 |
| 26 | 7.97 | 13.50 | 10.60 | 11.90 | 11.00 | 9.50 | 7.60 | 7.24 | 7.08 | 7.02 |
| 27 | 7.95 | 15.80 | 10.45 | 11.50 | 10.80 | 9.40 | 7.60 | 7.23 | 7.05 | 7.05 |
| 28 | 7.95 | 16.85 | 10.45 | 11.80 | 10.60 | 9.30 | 7.58 | 7.22 | 7.05 | 7.10 |
| 29 | 7.92 | 14.95 | ........ | 11.90 | 10.20 | 9.20 | 7.52 | 7.24 | 7.02 | 7.08 |
| 30 | 7.94 | 17.25 | ........ | 12.50 | 10.10 | 9.30 | 7.50 | 7.20 | 7.02 | ........ |
| 31 | 7.97 | 16.00 | ........ | 12.60 | ........ | 9.40 | ........ | 7.18 | 7.02 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 7.02 | 7.02 | 7.20 | 7.35 | 9.7 | 8.3 | 9.8 | 17.2 | 9.8 |
| 2 | 7.05 | 7.02 | 7.20 | 7.45 | 9.6 | 8.2 | 9.6 | 14.0 | 9.7 |
| 3 | 7.08 | 7.10 | 7.20 | 7.45 | 9.5 | 8.05 | 9.5 | 13.0 | 9.4 |
| 4 | 7.02 | 7.10 | 7.22 | 7.5 | 8.6 | 8.5 | 9.45 | 12.4 | 9.1 |
| 5 | 7.05 | 7.10 | 7.25 | 7.65 | 8.35 | 12.6 | 9.3 | 12.3 | 9.0 |
| 6 | 7.02 | 7.08 | 7.22 | 7.85 | 8.35 | 12.3 | 9.1 | 12.2 | 8.8 |
| 7 | 7.02 | 7.10 | 7.20 | 8.0 | 9.8 | 10.9 | 8.9 | 12.0 | 8.5 |
| 8 | 7.05 | 7.10 | 7.20 | 8.3 | 9.95 | 11.1 | 9.2 | 11.8 | 8.4 |
| 9 | 7.22 | 7.10 | 7.25 | 8.95 | 9.35 | 10.7 | 9.15 | 11.7 | 8.3 |
| 10 | 7.22 | 7.70 | 7.22 | 8.96 | 9.3 | 10.5 | 9.5 | 11.5 | 8.2 |
| 11 | 7.18 | 7.30 | 7.25 | 8.58 | 9.35 | 10.3 | 11.3 | 11.3 | 8.2 |
| 12 | 7.12 | 7.20 | 7.25 | 8.85 | 9.2 | 10.3 | 11.4 | 10.9 | 8.2 |
| 13 | 7.10 | 7.20 | 7.25 | 8.4 | 9.6 | 10.9 | 9.7 | 10.9 | 8.1 |
| 14 | 7.10 | 7.25 | 7.25 | 8.38 | 10.0 | 11.2 | 10.35 | 10.5 | 7.9 |
| 15 | 7.10 | 7.40 | 7.25 | 8.3 | 9.6 | 15.6 | 10.25 | 10.3 | 7.9 |
| 16 | 7.10 | 7.25 | 7.32 | 8.3 | 9.9 | 11.9 | 10.15 | 10.1 | 7.88 |
| 17 | 7.08 | 7.22 | 7.50 | 8.38 | 10.2 | 11.9 | 10.0 | 9.85 | 7.8 |
| 18 | 7.08 | 7.18 | 7.45 | 8.4 | 11.8 | 11.8 | 9.9 | 9.8 | 7.8 |
| 19 | 7.08 | 7.18 | 7.38 | 8.38 | 11.0 | 11.8 | 9.7 | 9.7 | 7.78 |
| 20 | 7.08 | 7.22 | 7.35 | 8.2 | 10.5 | 11.5 | 9.5 | 10.3 | 7.72 |
| 21 | 7.08 | 7.22 | 7.35 | 8.1 | 10.0 | 11.5 | 9.3 | 10.0 | 7.7 |
| 22 | 7.08 | 7.22 | 7.40 | 7.98 | 9.95 | 10.8 | 9.2 | 9.9 | 7.7 |
| 23 | 7.10 | 7.22 | 7.38 | 7.92 | 9.8 | 10.7 | 9.1 | 10.1 | 7.72 |
| 24 | 7.05 | 7.22 | 7.30 | 9.75 | 9.7 | 10.6 | 9.2 | 10.5 | 7.7 |
| 25 | 7.08 | 7.22 | 7.28 | 18.7 | 9.6 | 10.5 | 9.1 | 11.0 | 7.7 |
| 26 | 7.05 | 7.20 | 7.30 | 17.8 | 9.4 | 10.35 | 9.1 | 11.0 | 7.68 |
| 27 | 7.02 | 7.20 | 7.30 | 16.0 | 9.1 | 10.15 | 8.92 | 11.2 | 7.65 |
| 28 | 7.05 | 7.20 | 7.40 | 13.0 | 9.1 | 10.5 | 8.8 | 10.8 | 7.62 |
| 29 | 7.05 | 7.20 | 7.75 | 10.8 | 8.9 | 10.45 | 12.4 | 10.5 | 7.6 |
| 30 | 7.02 | 7.20 | 7.78 | 10.8 | ........ | 10.1 | 14.2 | 10.2 | 7.6 |
| 31 | 7.02 | ...... | 7.75 | 10.0 | ........ | 9.9 | ........ | 9.9 | ........ |

NOTE.—Gage height Mar. 7, 1912, is that recorded by observer at 8 a. m. and is probably in error as the hydrographer read gage 11.9 feet at 6.15 p. m. on a falling stage.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| --- | --- | --- | --- | --- | --- | --- |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

## EEL RIVER AT SCOTIA, CAL.

This station, which is located in sec. 18, T. 1 N., R. 1 E., at Wildwood Ferry, half a mile northeast of Scotia, was established December 15, 1910.

Van Duzen River enters the Eel about 7 miles below and Laribee Creek about 14 miles above the station.

The staff gage is in four sections on the left bank of the river. The first three sections are 70 feet above the ferry; the upper section is at the mouth of Dean Creek, about 150 feet farther upstream.

Discharge measurements are made from the ferry or a small boat. No estimates of daily or monthly discharge have been prepared.

*Discharge measurements of Eel River at Scotia, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-ft.* | 1911. | | *Feet.* | *Sec.-ft.* |
| Aug. 17 | W. V. Hardy | | 9[illegible] | Nov. 25 | E. O. Christiansen | 9.9[illegible] | 201 |
| Dec. 15 | do | 11.59 | 2,110 | | | | |
| | | | | 1912. | | | |
| 1911. | | | | Feb. 3 | E. O. Christiansen | 13.28 | 5,900 |
| Aug. 28 | E. O. Christiansen | 9.90 | 128 | Mar. 19 | do | 15.94 | 15,[illegible]00 |
| Sept. 26 | do | 9.61 | 78 | May 31 | do | 12.85 | 5,200 |

*Daily gage height, in feet, of Eel River at Scotia, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | |
| 1 | | 16.8 | 2[illegible].95 | 12.6 | 13.9 | 12.5 | 12.2 | 10.7 | | |
| 2 | | 1[illegible].75 | 2[illegible] | 12.5 | 14.0 | 12.55 | 12.3 | 10.6 | | |
| 3 | | 1[illegible].7 | 2[illegible] | 12.5 | 14.0 | 12.7 | 12.25 | 10.5 | | |
| 4 | | 1[illegible].65 | 18.25 | 12.7 | 13.75 | 12.95 | 12.2 | 10.5 | | |
| 5 | | 16.6 | 17.2 | 14.1 | 16.9 | 12.9 | 12.05 | 10.45 | | |
| 6 | | 16.25 | 16.65 | 18.55 | 19.85 | 12.95 | 12.0 | 10.4 | | |
| 7 | | 1[illegible].5 | 15.9 | 24.3 | 16.95 | 12.7 | 11.9 | 10.4 | | |
| 8 | | 1[illegible].6 | 15.1 | 22.8 | 17.45 | 12.5 | 11.9 | 10.3 | | |
| 9 | | 1[illegible].95 | 14.6 | 19.1 | 14.9 | 12.5 | 11.7 | 10.3 | | |
| 10 | | 11.25 | 14.55 | 17.25 | 16.25 | 12.4 | 11.7 | 10.25 | | |
| 11 | | 12.7 | 16.7 | 16.15 | 15.55 | 12.2 | 11.7 | 10.25 | | |
| 12 | | 13.4 | 16.6 | 15.35 | 14.3 | 12.2 | 11.6 | 10.2 | | |
| 13 | | 14.55 | 17.6 | 14.8 | 13.75 | 12.25 | 11.55 | 10.2 | | |
| 14 | | 14.25 | 17.4 | 14.4 | 13.75 | 12.2 | 11.5 | 10.15 | | |
| 15 | | 15.1 | 16.2 | 14.15 | 13.75 | 12.1 | 11.7 | 10.15 | | |
| 16 | | 14.6 | 15.35 | 14.0 | 13.75 | 12.15 | 11.6 | 10.1[illegible] | | |
| 17 | | 15.85 | 14.8 | 13.9 | 13.6 | 12.7 | 11.55 | 10.15 | | |
| 18 | 11.59 | 15.5 | 14.95 | 13.9 | 13.[illegible] | 14.05 | 11.4 | 10.1[illegible] | | |
| 19 | 11.47 | 22.7 | 14.9 | 13.9 | 13.55 | 14.9 | 11.3 | 10.1[illegible] | | |
| 20 | 11.35 | 23.4 | 14.4 | 13.8 | 13.55 | 13.7 | 11.25 | 10.15 | | |
| 21 | 11.3 | 22.2 | 14.1 | 13.85 | 13.15 | 13.3 | 11.2 | 10.15 | | |
| 22 | 11.2 | 16.95 | 13.75 | 13.8 | 13.[illegible] | 13.15 | 11.2 | 10.1[illegible] | | |
| 23 | 11.15 | 15.55 | 13.5 | 13.8 | 13.15 | 13.0 | 11.15 | 10.1[illegible] | | |
| 24 | 11.1 | 17.0 | 13.3 | 13.9 | 13.2 | 13.9 | 11.0 | 10.1 | | 9.6 |
| 25 | 11.05 | 16.2 | 13.2 | 13.8 | 13.3 | 12.75 | 10.9 | 10.0 | | 9.6 |
| 26 | 11.0 | 18.3 | 12.4 | 13.75 | 13.4 | 12.5 | 10.8 | 9.92 | | 9.6 |
| 27 | 10.95 | 18.7 | 12.9 | 13.5 | 13.2 | 12.55 | 10.8 | 9.9 | | 9.6 |
| 28 | 10.9 | 24.2 | 12.75 | 13.45 | 12.95 | 12.[illegible] | 10.8 | | 9.9 | 9.6 |
| 29 | 10.85 | 22.15 | | 13.5 | 12.75 | 12.15 | 10.75 | | | 9.6 |
| 30 | 10.8 | 22.25 | | 13.5 | 12.55 | 12.1 | 10.7 | | | 9.6 |
| 31 | 10.8 | 25.0 | | 13.75 | | 12.1 | | | | |

[illegible] year at Normal [illegible] 1911–12 [illegible]

[illegible]

## MIDDLE FORK EEL RIVER NEAR COVELO, CAL.

This station, which is located below the highway bridge near [illegible] ranger station in the [illegible] sec. [illegible], T. [illegible] N., R. [illegible] W., about [illegible] miles east of Covelo, was established August [illegible], 1911.

The gage is an inclined staff in two sections on the left bank, about [illegible] mile west of ranger station and [illegible] mile below the bridge. The channel is composed of small bowlders and gravel and appears permanent. Discharge measurements are made from the downstream side of the bridge or by wading. The discharge of W[illegible] Creek, which enters between the bridge and the gage, is added to give the flow at the gage.

This station is maintained in cooperation with the United States Forest Service, by whom the gage-height record was furnished.

*Discharge measurements of Middle Fork Eel River near Covelo, Cal., in 1911–12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| [illegible] | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| [illegible] | [illegible] | [illegible] | [illegible] | Jan. 22 | E. O. Christ[illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Mar. 12 | R. C. Rice | 10.[illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 31 | do | 10.44 | [illegible] |

[illegible] measurements made at bridge above mouth of Williams Creek. To get the flow at the [illegible] the flow of Williams Creek was added to discharge measurements as follows: Jan. [illegible], [illegible] second-feet; Mar. 12, [illegible] second-feet; Mar. 31, 50 second-feet.

*Daily gage height, in feet, of Middle Eel River near Covelo, Cal., for 1911–12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | ........ | 7.22 | 11 | ........ | 7.25 | 21 | ........ | 7.18 |
| 2 | ........ | 7.22 | 12 | ........ | 7.25 | 22 | 7.40 | 7.20 |
| 3 | ........ | 7.25 | 13 | ........ | 7.25 | 23 | 7.30 | 7.20 |
| 4 | ........ | 7.24 | 14 | ........ | 7.25 | 24 | 7.22 | 7.19 |
| 5 | ........ | 7.20 | 15 | ........ | 7.25 | 25 | 7.30 | 7.22 |
| 6 | ........ | 7.22 | 16 | ........ | 7.25 | 26 | 7.25 | 7.22 |
| 7 | ........ | 7.24 | 17 | ........ | 7.24 | 27 | 7.28 | 7.28 |
| 8 | ........ | 7.22 | 18 | ........ | 7.21 | 28 | 7.24 | 7.28 |
| 9 | ........ | 7.22 | 19 | ........ | 7.20 | 29 | 7.22 | 7.31 |
| 10 | ........ | 7.22 | 20 | ........ | 7.18 | 30 | 7.21 | 7.30 |
| | | | | | | 31 | 7.22 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | April. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 7.30 | 7.30 | 7.50 | 7.9 | 10.2 | 9.6 | 10.4 | 14.5 | 11.0 |
| 2 | 7.29 | 7.30 | 7.55 | 7.9 | 10.2 | 9.5 | 10.35 | 12.6 | 10.9 |
| 3 | 7.30 | 7.29 | 7.60 | 8.0 | 10.0 | 9.4 | 10.4 | 12.7 | 10.7 |
| 4 | 7.30 | 7.30 | 7.60 | 8.1 | 10.0 | 9.4 | 10.2 | ........ | 10.5 |
| 5 | 7.31 | 7.29 | 7.60 | 8.1 | 10.0 | 9.5 | 10.2 | 12.8 | 10.4 |
| 6 | 7.20 | 7.30 | 7.75 | 8.1 | 10.0 | 10.4 | 10.35 | 13.1 | 10.2 |
| 7 | 7.28 | 7.30 | 8.00 | 9.0 | 10.8 | 10.4 | 10.3 | 13.0 | 10.0 |
| 8 | 7.31 | ........ | 7.95 | 9.5 | 12.3 | 10.2 | 10.4 | 12.8 | 10.0 |
| 9 | 7.32 | 7.35 | 7.85 | 10.3 | 11.2 | 10.0 | 10.3 | ........ | 9.8 |
| 10 | 7.40 | 8.25 | 7.80 | 9.8 | 10.9 | 9.8 | 11.4 | 12.1 | 9.7 |
| 11 | 7.40 | 8.08 | 7.80 | 9.5 | 10.9 | 9.8 | 11.1 | 12.1 | 9.6 |
| 12 | 7.35 | 7.80 | 7.70 | 9.3 | 10.8 | 10.0 | 10.7 | 12.1 | 9.6 |
| 13 | 7.38 | 7.72 | 7.70 | 9.6 | 10.6 | 9.8 | 10.5 | 11 6 | 9.5 |
| 14 | 7.35 | 7.70 | 7.70 | 10.3 | 10.5 | 9.9 | 10.6 | 11.6 | 9.5 |
| 15 | 7.34 | 8.15 | 7.65 | 10.0 | 10.6 | 10.6 | 10.6 | 11.4 | 9.5 |
| 16 | 7.32 | 8.85 | 7.72 | 10.0 | 10.7 | 10.3 | 10.6 | 11.0 | 9.4 |
| 17 | 7.30 | 8.30 | 7.88 | 9.7 | 15.0 | 10.3 | 10.6 | 10.9 | 9.1 |
| 18 | 7.30 | 8.15 | 7.65 | 9.5 | 13.3 | 10.4 | 10.5 | 10.8 | 9.1 |
| 19 | 7.28 | 8.02 | 7.70 | 9.35 | 12.1 | 10.4 | 10.4 | 10.8 | 9.1 |
| 20 | 7.28 | 8.05 | 7.70 | 9.3 | 11.4 | 10.5 | 10.3 | 11.0 | 9.1 |
| 21 | 7.28 | 7.95 | 7.70 | 9.3 | 11.1 | 10.5 | 10.1 | 10.7 | 9.1 |
| 22 | 7.28 | 7.84 | 7.70 | 9.3 | 10.6 | 10.6 | 10.0 | 10.8 | 9.0 |
| 23 | 7.28 | 7.80 | 7.70 | 9.3 | 10.4 | 10.7 | 10.1 | 10.8 | 9.0 |
| 24 | 7.28 | 7.74 | 7.72 | 11.0 | 10.2 | 10.3 | 10.15 | 11.4 | 9.0 |
| 25 | 7.26 | 7.70 | 7.75 | 18.6 | 10.0 | 10.7 | 10.1 | 12.6 | 9.0 |
| 26 | 7.30 | 7.70 | 7.78 | 15.6 | 9.7 | 10.4 | 10.1 | 12.0 | 8.95 |
| 27 | 7.30 | 7.68 | 7.95 | 13.0 | 9.7 | 10.7 | 10.0 | 11.9 | 8.9 |
| 28 | 7.30 | 7.65 | 8.00 | 12.9 | 9.6 | 11.0 | 10.6 | 11.7 | 8.8 |
| 29 | 7.35 | 7.64 | 7.85 | 10.9 | 9.6 | 11.2 | 12.6 | 11.5 | 8.8 |
| 30 | 7.35 | 7.60 | 7.85 | 10.6 | ........ | 10.6 | 13.5 | 11.5 | 8.75 |
| 31 | 7.31 | ........ | 7.95 | 10.4 | ........ | 10.4 | ........ | 11.3 | ........ |

### SOUTH FORK OF EEL RIVER AT GARBERVILLE, CAL.

This station, which is located at the highway bridge in the SW. ¼ sec. 24, T. 4 S., R. 3 E., about a mile southwest of Garberville, was established August 25, 1911.

A chain gage is used and is on the downstream side of the bridge. The channel is composed of bowlders and gravel and will probably shift slightly during high water. Discharge measurements are made from the bridge or by wading.

Discharge estimates are withheld until additional data are available.

### VAN DUZEN RIVER AT BRIDGEVILLE, CAL.

This station, which is located just below the highway bridge at Bridgeville, in the NW. ¼ sec. 13, T. 1 N., R. 3 E., was established September 22, 1911.

The gage is a staff, in two sections, on the right bank just below bridge. The channel is composed of gravel and will probably shift during high water. The drainage area above the station is 194 square miles. Discharge measurements are made from a car and cable 90 feet below the gage or by wading.

Discharge estimates are withheld until additional data are available.

*Discharge measurements of Van Duzen River at Bridgeville, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 22 | E. O. Christiansen | 4.50 | 6.9 | Jan. 27 | E. O. Christiansen | 12.94 | 4,910 |
| Oct. 19 | do | 4.71 | 12 | Mar. 12 | do | 8.70 | 1,320 |
| | | | | Apr. 26 | do | 7.35 | 569 |
| 1912. | | | | 27 | do | 7.25 | 515 |
| Jan. 6 | E. O. Christiansen | 6.02 | 155 | June 7 | do | 6.66 | 281 |

*Daily gage height, in feet, of Van Duzen River at Bridgeville, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | | 4.59 | 4.64 | 4.90 | 6.0 | 8.0 | 6.55 | 7.4 | 17.2 | 7.1 |
| 2 | | 4.60 | 4.65 | 4.90 | 5.88 | 7.9 | 6.5 | 7.4 | 13.4 | 7.0 |
| 3 | | 4.62 | 4.66 | 4.89 | 5.8 | 7.75 | 6.5 | 7.25 | 10.8 | 6.9 |
| 4 | | 4.66 | 4.65 | 4.88 | 5.8 | 7.55 | 6.4 | 7.0 | 9.6 | 6.9 |
| 5 | | 4.66 | 4.63 | 5.12 | 5.85 | 7.5 | 9.2 | 7.0 | 8.9 | 6.9 |
| 6 | | 4.64 | 4.65 | 5.46 | 6.05 | 7.6 | 10.4 | 7.0 | 8.8 | 6.9 |
| 7 | | 4.61 | 4.67 | 5.80 | 9.8 | 8.0 | 9.4 | 7.0 | 8.6 | 6.75 |
| 8 | | 4.62 | 4.72 | 5.47 | 8.2 | 9.0 | 9.6 | 7.0 | 8.4 | 6.7 |
| 9 | | 4.81 | 5.12 | 5.36 | 10.0 | 8.6 | 9.4 | 7.0 | 8.2 | 6.6 |
| 10 | | 4.88 | 5.65 | 5.24 | 9.8 | 8.7 | 8.4 | 6.9 | 7.95 | 6.5 |
| 11 | | 4.81 | 5.61 | 5.18 | 9.3 | 8.5 | 8.0 | 7.0 | 7.75 | 6.5 |
| 12 | | 4.79 | 5.61 | 5.06 | 8.9 | 8.4 | 8.4 | 7.0 | 7.65 | 6.5 |
| 13 | | 4.75 | 5.46 | 4.92 | 10.8 | 8.8 | 8.2 | 7.15 | 7.5 | 6.5 |
| 14 | | 4.82 | 5.48 | 5.05 | 9.2 | 8.4 | 8.0 | 7.0 | 7.45 | 6.5 |
| 15 | | 4.88 | 6.30 | 5.25 | 8.2 | 8.3 | 10.0 | 7.0 | 7.2 | 6.5 |
| 16 | | 4.78 | 6.50 | 5.50 | 7.75 | 10.8 | 10.0 | 7.0 | 7.15 | 6.48 |
| 17 | | 4.77 | 6.05 | 5.60 | 7.4 | 14.4 | 9.5 | 6.9 | 7.05 | 6.38 |
| 18 | | 4.74 | 5.62 | 5.56 | 7.7 | 12.6 | 9.0 | 6.8 | 7.0 | 6.28 |
| 19 | | 4.70 | 5.48 | 5.62 | 7.8 | 10.8 | 8.6 | 6.8 | 7.1 | 6.19 |
| 20 | | 4.69 | 5.32 | 5.65 | 7.6 | 9.1 | 8.3 | 6.8 | 7.55 | 6.12 |
| 21 | | 4.65 | 5.25 | 5.55 | 7.2 | 8.6 | 8.1 | 6.7 | 7.8 | 6.1 |
| 22 | 4.51 | 4.65 | 5.16 | 5.62 | 7.05 | 8.0 | 7.95 | 6.7 | 7.8 | 6.0 |
| 23 | 4.51 | 4.65 | 5.05 | 5.68 | 7.0 | 7.95 | 7.95 | 6.75 | 8.2 | 6.08 |
| 24 | 4.51 | 4.66 | 5.04 | 5.72 | 13.9 | 7.65 | 7.9 | 7.1 | 8.6 | 6.08 |
| 25 | 4.51 | 4.68 | 5.01 | 5.62 | 24.1 | 7.5 | 7.9 | 7.4 | 8.7 | 6.04 |
| 26 | 4.53 | 4.69 | 4.96 | 5.60 | 18.0 | 7.3 | 7.85 | 7.45 | 8.5 | 6.01 |
| 27 | 4.59 | 4.67 | 4.91 | 6.40 | 13.6 | 7.0 | 7.8 | 7.15 | 8.4 | 6.0 |
| 28 | 4.59 | 4.65 | 4.91 | 6.20 | 10.8 | 7.0 | 7.75 | 7.7 | 7.95 | 5.98 |
| 29 | 4.59 | 4.65 | 4.90 | 6.00 | 9.9 | 6.85 | 7.7 | 16.8 | 7.75 | 5.98 |
| 30 | 4.59 | 4.66 | 4.90 | 5.95 | 9.1 | | 7.55 | 15.5 | 7.4 | 5.95 |
| 31 | 4.59 | 4.68 | | 6.00 | 8.4 | | 7.45 | | 7.25 | |

NOTE.—Jan. 25, maximum recorded gage height, 26.0 feet at 4.55 p. m.

... station, which is located at the ... about ... mile above the ... was established August ... 11.

... square miles. ... low stage of ...

Discharge measurements of ...

Discharge measurements of ...

*Daily gage height, in feet, of Yager Creek at Carlotta, Cal., for 1911-12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 21 | 5.6 | 5.7 | 6.3 | 6.78 | 8.15 | 7.7 | 6.95 | 7.35 | 6.51 |
| 22 | 5.6 | 5.6 | 6.25 | 6.68 | 7.85 | 7.49 | 6.9 | 7.38 | 6.50 |
| 23 | 5.6 | 5.6 | 6.35 | 6.62 | 7.9 | 7.36 | 6.9 | 7.39 | 6.68 |
| 24 | 5.6 | 5.6 | 6.75 | 8.9 | 7.65 | 7.29 | 6.88 | 7.5 | 6.75 |
| 25 | 5.6 | 5.6 | 6.45 | 14.7 | 7.48 | 7.22 | 7.35 | 7.42 | 6.62 |
| 26 | 5.6 | 5.6 | 6.4 | 12.2 | 7.38 | 7.13 | 7.75 | 7.34 | 6.60 |
| 27 | 5.6 | 5.6 | 7.0 | 10.1 | 7.28 | 7.03 | 7.65 | 7.42 | 6.60 |
| 28 | 5.6 | 5.6 | 7.75 | 9.1 | 7.18 | 6.94 | 7.7 | 7.30 | 6.58 |
| 29 | 5.6 | 5.6 | 7.0 | 8.5 | 7.14 | 6.92 | 12.6 | 7.26 | 6.55 |
| 30 | 5.6 | 5.6 | 6.8 | 7.95 | ........ | 6.90 | 11.0 | 7.21 | 6.55 |
| 31 | 5.6 | ........ | 7.5 | 7.65 | ........ | 6.78 | ........ | 7.15 | ........ |

NOTE.—Jan. 25, 1912, maximum recorded gage height, 15.7 feet at 4 p. m.

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the Eel River basin:

*Miscellaneous measurements in Eel River drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| Oct. 21, 1903 | Eel River | Near Stingleys station | 189 |
| Sept. 20, 1905 | ....do | Laytonville | 27 |
| Aug. 15, 1910 | ....do | Dyerville | 28 |
| Sept. 19, 1905 | Eel River, Middle | Covelo | 7 |
| Sept. 20, 1905 | ....do | Laytonville | 8 |
| Aug. 14, 1910 | ....do | Just above junction with South Eel | 8.3 |
| Sept. 3, 1905 | Eel River, South | Just above Preston | 5.5 |
| Sept. 19, 1905 | ....do | Hearst | 9.5 |
| Sept. 20, 1905 | ....do | Laytonville | 19.2 |
| Aug. 14, 1910 | ....do | Just above junction with Middle Eel | 5.3 |
| Nov. 5, 1911 | Burger Creek | Road crossing, sec. 10, T. 21 N., R. 14 W | a.25 |
| Nov. 16, 1911 | ....do | ....do | a1.00 |
| Jan. 16, 1912 | ....do | ....do | a5 |
| Feb. 1, 1912 | ....do | ....do | a3 |
| Apr. 2, 1912 | ....do | ....do | a3 |
| Nov. 4, 1911 | Tomki Creek | Road crossing, sec. 26, T. 19 N., R. 13 W | Dry. |
| Apr. 4, 1912 | ....do | ....do | 4 |
| Apr. 3, 1912 | Outlet Creek | Above Long Valley Creek, sec. 33, T. 20 N., R. 14 W. | 61 |
| Do | Long Valley Creek | Mouth | a4 |
| Sept. 5, 1910 | South Fork of Eel River | 1 mile south of Garberville | 38 |
| Aug. 15, 1910 | ....do | Near mouth at Dyerville | 36 |
| May 28, 1912 | Buck Creek | Garberville | a.5 |
| Nov. 19, 1911 | Redwood Creek | Briceland, SW. ¼ sec. 18, T. 45, R. 3 E | a.5 |
| Jan. 15, 1912 | ....do | ....do | 3.0 |
| May 27, 1912 | ....do | ....do | a2.0 |
| May 28, 1912 | Bohne Creek | Highway bridge, SW. ¼ sec. 1, T. 45, R. 3 E | 20 |
| Mar 8, 1912 | Bear Creek | Highway bridge, 3 miles north of Garberville | a5 |
| Mar. 18, 1912 | Rocky Glen Creek | Highway bridge near mouth, SW. ¼ sec. 19, T. 35, R. 4 E. | a3 |
| May 28, 1912 | ....do | ....do | 13 |
| Do | Elk Creek | Below highway bridge near Miranda NW. ¼, sec. 21, T. 35, R. 3 E. | 12 |
| May 29, 1912 | Bear Creek | Near mouth near Dyerville, NW. ¼ sec. 32, T. 1 N., R. 2 E. | 16 |
| Do | Monument Creek | Highway bridge near Rio Dell, sec. 18, T. 1 N., R. 1 E. | 13 |
| Aug. 15, 1910 | Van Dusen River | ¼ mile south of Alton | 5.1 |
| June 7, 1912 | Little Larabee Creek | Near Bridgeville, sec. 7, T. 1 N., R. 3 E | 9.3 |
| Sept. 22, 1911 | Grizzly Creek | Near mouth, sec. 11, T. 1 N., R. 2 E | a.25 |
| Oct. 19, 1911 | ....do | ....do | a.25 |
| Jan. 6, 1912 | ....do | ....do | a3.0 |
| Apr. 27, 1912 | ....do | ....do | a2.0 |
| June 7, 1912 | ....do | ....do | a1.0 |
| Sept. 22, 1911 | Healy Creek | Near mouth, road from Carlotta to Bridgeville | a1 |
| Oct. 19, 1911 | ....do | ....do | a.2 |
| June 7, 1912 | ....do | ....do | a1.0 |
| Do | Salmon Creek | ....do | a1.0 |
| Sept. 21, 1911 | Lawrence Creek | 500 feet below Booth Run | 1.5 |

a Estimated.

## MAD RIVER BASIN.

### MAD RIVER NEAR ARCATA, CAL.

This station, which is located at the Oregon & Eureka Railroad bridge at Essex, in sec. 15, T. 6 N., R. 1 E., 1 mile below Warren Creek and about 5 miles northeast of Arcata, was established December 29, 1910.

The gage is a vertical staff, in two sections, on the right bank at the railroad bridge. The channel is composed of sand and gravel and will shift slightly at high stages. The drainage area is 452 square miles. Discharge measurements are made from a highway bridge just above the gage, or by wading.

Estimates of discharge are withheld until additional measurements are available.

*Discharge measurements of Mad River near Arcata, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Aug. 20 | W. V. Hardy | | 32 | Jan. 9 | E. O. Christiansen | 17.20 | [illegible] |
| Dec. 29 | .....do | 12.70 | 241 | Mar. 6 | .....do | 16.70 | [illegible] |
| 1911. | | | | Apr. 22 | .....do | 14.02 | [illegible] |
| Aug. 30 | E. O. Christiansen | 11.84 | 29 | May 18 | .....do | 13.82 | [illegible] |
| Sept. 25 | .....do | 11.79 | 21 | June 21 | .....do | 13.04 | [illegible] |

*Daily gage height, in feet, of Mad River near Arcata, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | |
| 1 | .... | 12.9 | 17.9 | 13.9 | 14.6 | 13.4 | 13.3 | 12.35 | 11.95 | [illegible] |
| 2 | .... | 12.8 | 17.8 | 13.95 | 14.6 | 13.5 | 13.3 | 12.3 | 11.95 | [illegible] |
| 3 | .... | 12.7 | 18.0 | 13.85 | 14.1 | 13.55 | 13.2 | 12.3 | 11.9 | [illegible] |
| 4 | .... | 12.7 | 17.1 | 14.2 | 14.1 | 13.45 | 13.15 | 12.3 | 11.9 | [illegible] |
| 5 | .... | 12.65 | 16.1 | 14.4 | 19.0 | 14.15 | 13.05 | 12.3 | 11.9 | [illegible] |
| 6 | .... | 12.6 | 16.6 | 15.25 | 17.1 | 13.8 | 13.0 | 12.25 | 11.9 | [illegible] |
| 7 | .... | 12.55 | 16.15 | 17.55 | 15.95 | 13.9 | 13.0 | 12.2 | 11.9 | [illegible] |
| 8 | .... | 12.55 | 15.5 | 17.3 | 15.5 | 14.0 | 12.95 | 12.2 | 11.9 | [illegible] |
| 9 | .... | 13.2 | 15.25 | 16.2 | 15.6 | 14.4 | 12.95 | 12.2 | 11.9 | [illegible] |
| 10 | .... | 14.6 | 15.1 | 15.95 | 16.2 | 14.1 | 12.9 | 12.2 | 11.9 | [illegible] |
| 11 | .... | 17.2 | 16.55 | 15.5 | 16.75 | 13.95 | 12.8 | 12.15 | 11.9 | [illegible] |
| 12 | .... | 15.35 | 16.35 | 15.3 | 16.2 | 13.75 | 12.7 | 12.15 | 11.9 | [illegible] |
| 13 | .... | 15.15 | 16.3 | 15.15 | 15.7 | 13.6 | 12.7 | 12.1 | 11.9 | [illegible] |
| 14 | .... | 14.75 | 15.85 | 15.05 | 15.45 | 13.5 | 12.7 | 12.1 | 11.9 | [illegible] |
| 15 | .... | 14.65 | 15.55 | 15.0 | 15.1 | 13.45 | 12.65 | 12.05 | 11.9 | [illegible] |
| 16 | .... | 14.5 | 15.1 | 15.0 | 15.0 | 13.7 | 12.6 | 12.05 | 11.9 | [illegible] |
| 17 | .... | 14.45 | 15.05 | 15.05 | 14.9 | 14.6 | 12.6 | 12.05 | 11.85 | [illegible] |
| 18 | .... | 14.55 | 15.85 | 15.1 | 14.7 | 18.1 | 12.6 | 12.05 | 11.85 | [illegible] |
| 19 | .... | 22.0 | 15.5 | 15.1 | 14.5 | 16.4 | 12.55 | 12.0 | 11.85 | [illegible] |
| 20 | .... | 20.8 | 15.3 | 15.1 | 14.3 | 15.55 | 12.55 | 12.0 | 11.85 | [illegible] |
| 21 | .... | 18.0 | 15.0 | 15.15 | 14.15 | 15.1 | 12.5 | 12.0 | 11.85 | [illegible] |
| 22 | .... | 16.5 | 14.8 | 15.05 | 14.1 | 14.7 | 12.5 | 12.0 | 11.85 | [illegible] |
| 23 | .... | 15.95 | 14.6 | 15.25 | 14.0 | 14.6 | 12.5 | 12.0 | 11.85 | [illegible] |
| 24 | .... | 15.7 | 14.5 | 15.15 | 13.9 | 14.2 | 12.45 | 12.0 | 11.85 | [illegible] |
| 25 | .... | 16.0 | 14.45 | 14.9 | 13.85 | 13.95 | 12.45 | 12.0 | 11.85 | [illegible] |
| 26 | .... | 16.8 | 14.2 | 14.7 | 13.8 | 13.8 | 12.4 | 12.0 | 11.85 | [illegible] |
| 27 | .... | 16.75 | 14.2 | 14.5 | 13.75 | 13.65 | 12.4 | 12.0 | 11.85 | [illegible] |
| 28 | 12.7 | 16.6 | 14.05 | 14.2 | 13.6 | 13.5 | 12.4 | 11.95 | 11.85 | [illegible] |
| 29 | 12.7 | 16.3 | ........ | 14.25 | 13.5 | 13.45 | 12.4 | 11.95 | 11.85 | [illegible] |
| 30 | 12.7 | 19.75 | ........ | 14.7 | 13.45 | 13.4 | 12.35 | 11.95 | 11.85 | [illegible] |
| 31 | 13.0 | 19.3 | ........ | 14.65 | ........ | 13.3 | ........ | 11.95 | 11.85 | ........ |

*Daily gage height, in feet, of Mad River near Arcata, Cal., for 1910-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 11.8 | 11.80 | 12.00 | 14.35 | 15.4 | 14.35 | 14.55 | 22.2 | 14.25 |
| 2 | 11.8 | 11.80 | 12.08 | 13.6 | 15.0 | 14.3 | 14.4 | 18.4 | 13.9 |
| 3 | 11.8 | 11.80 | 12.08 | 13.2 | 14.9 | 14.25 | 14.35 | 17.8 | 13.9 |
| 4 | 11.8 | 11.80 | 12.08 | 13.15 | 14.7 | 14.2 | 14.3 | 16.9 | 13.75 |
| 5 | 11.8 | 11.80 | 12.05 | 12.9 | 14.6 | 14.8 | 14.2 | 16.2 | 13.5 |
| 6 | 11.8 | 11.80 | 12.05 | 12.9 | 14.5 | 16.7 | 14.2 | 16.0 | 13.5 |
| 7 | 11.82 | 11.80 | 12.30 | 18.0 | 14.6 | 17.0 | 14.1 | 15.5 | 13.45 |
| 8 | 11.85 | 11.82 | 12.25 | 16.9 | 16.2 | 16.2 | 14.1 | 15.2 | 13.4 |
| 9 | 11.85 | 11.85 | 12.20 | 17.2 | 16.2 | 16.0 | 14.05 | 15.1 | 13.35 |
| 10 | 11.85 | 12.40 | 12.18 | 16.6 | 16.0 | 15.6 | 14.05 | 14.7 | 13.3 |
| 11 | 11.85 | 12.40 | 12.15 | 16.0 | 15.9 | 15.4 | 14.5 | 14.65 | 13.2 |
| 12 | 11.85 | 12.25 | 12.10 | 15.4 | 15.7 | 15.2 | 14.6 | 14.4 | 13.3 |
| 13 | 11.85 | 12.18 | 12.08 | 18.4 | 15.5 | 15.2 | 14.55 | 14.2 | 13.3 |
| 14 | 11.88 | 12.10 | 12.08 | 16.6 | 15.4 | 15.1 | 14.4 | 14.1 | 13.4 |
| 15 | 11.85 | 13.12 | 12.05 | 15.7 | 15.6 | 15.4 | 14.35 | 14.0 | 13.3 |
| 16 | 11.85 | 13.55 | 12.10 | 15.3 | 18.4 | 16.7 | 14.3 | 14.0 | 13.2 |
| 17 | 11.85 | 13.00 | 12.74 | 14.95 | 23.5 | 16.6 | 14.25 | 13.8 | 13.1 |
| 18 | 11.85 | 12.70 | 12.75 | 14.7 | 20.8 | 16.2 | 14.2 | 13.8 | 13.1 |
| 19 | 11.85 | 12.35 | 12.60 | 14.6 | 18.5 | 16.0 | 14.2 | 13.75 | 13.0 |
| 20 | 11.85 | 12.30 | 12.58 | 14.3 | 16.8 | 15.8 | 14.15 | 14.1 | 13.05 |
| 21 | 11.85 | 12.20 | 12.55 | 14.05 | 16.0 | 15.5 | 14.1 | 14.3 | 13.05 |
| 22 | 11.85 | 12.20 | 12.48 | 13.85 | 15.8 | 15.2 | 14.0 | 14.4 | 13.0 |
| 23 | 11.82 | 12.18 | 12.50 | 13.7 | 15.3 | 15.1 | 13.95 | 14.5 | 13.0 |
| 24 | 11.82 | 12.10 | 12.52 | 14.2 | 15.3 | 15.0 | 14.1 | 14.95 | 12.98 |
| 25 | 11.82 | 12.08 | 12.58 | 23.8 | 15.0 | 15.0 | 14.5 | 15.0 | 12.98 |
| 26 | 11.82 | 12.02 | 12.60 | 23.1 | 14.85 | 14.9 | 14.9 | 15.0 | 12.9 |
| 27 | 11.82 | 12.02 | 13.29 | 19.0 | 14.7 | 14.9 | 14.9 | 14.85 | 12.88 |
| 28 | 11.82 | 12.00 | 14.60 | 17.7 | 14.55 | 14.9 | 14.8 | 14.8 | 12.85 |
| 29 | 11.82 | 12.00 | 13.60 | 16.6 | 14.45 | 14.8 | 19.1 | 14.65 | 12.8 |
| 30 | 11.82 | 12.00 | 13.40 | 16.2 | ........ | 14.7 | 19.9 | 14.4 | 12.78 |
| 31 | 11.82 | ........ | 14.05 | 15.7 | ........ | 14.6 | ........ | 14.3 | ........ |

### MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the Mad River basin:

*Miscellaneous measurements in Mad River drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| Oct. 20, 1903 | Mad River | Near Vance | 53 |
| Sept. 19, 1911 | .....do | Below mouth of Bug Creek, sec. 9, T. 3 N., R. 4 E. | 46 |
| June 10, 1912 | North Fork of Mad River | 600 feet below highway bridge at Korbel | 25 |

## REDWOOD CREEK BASIN.

### REDWOOD CREEK NEAR KORBEL, CAL.

This station, which is located at the highway bridge at Bair's ranch, in the SE. ¼ sec. 28, T. 7 N., R. 3 E., 200 feet above Minor Creek and about 9 miles northeast of Korbel, was established September 4, 1911.

A temporary staff gage was used from September 4 to October 14, when a permanent chain gage was installed on the downstream side of bridge at the same datum as the staff gage. The channel is composed of sand and gravel and will probably shift slightly at high

[illegible]

| | | | | | | |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

## EEL RIVER AT SCOTIA, CAL.

This station, which is located in sec. 18, T. 1 N., R. 1 E., at Wildwood Ferry, half a mile northeast of Scotia, was established December 15, 1910.

Van Duzen River enters the Eel about 7 miles below and Larabee Creek about 14 miles above the station.

The staff gage is in four sections on the left bank of the river. The first three sections are 70 feet above the ferry; the upper section is at the mouth of Dean Creek, about 150 feet farther upstream.

Discharge measurements are made from the ferry or a small boat.

No estimates of daily or monthly discharge have been prepared.

*Discharge measurements of Eel River at Scotia, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-ft.* | 1911. | | *Feet.* | *Sec.-ft.* |
| Aug. 17 | W. V. Hardy | ...... | 9. | Nov. 28 | E. O. Christiansen | 9.98 | 201 |
| Dec. 15 | do | 11.59 | 2,110 | | | | |
| | | | | 1912. | | | |
| 1911. | | | | Feb. 3 | E. O. Christiansen | 13.28 | 5,890 |
| Aug. 28 | E. O. Christiansen | 9.90 | 125 | Mar. 19 | do | 15.94 | 15,800 |
| Sept. 26 | do | 9.61 | 78 | May 31 | do | 12.85 | 5,200 |

*Daily gage height, in feet, of Eel River at Scotia, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | |
| 1 | ...... | 10.8 | 20.95 | 12.6 | 13.9 | 12.5 | 12.2 | 10.7 | ...... | ...... |
| 2 | ...... | 10.75 | 20.55 | 12.5 | 14.0 | 12.55 | 12.3 | 10.6 | ...... | ...... |
| 3 | ...... | 10.7 | 20.15 | 12.5 | 14.0 | 12.7 | 12.25 | 10.5 | ...... | ...... |
| 4 | ...... | 10.65 | 18.25 | 12.7 | 13.75 | 12.95 | 12.2 | 10.5 | ...... | ...... |
| 5 | ...... | 10.6 | 17.2 | 14.1 | 16.9 | 12.9 | 12.05 | 10.45 | ...... | ...... |
| 6 | ...... | 10.55 | 16.65 | 18.55 | 19.85 | 12.95 | 12.0 | 10.4 | ...... | ...... |
| 7 | ...... | 10.65 | 15.9 | 24.3 | 16.95 | 12.7 | 11.9 | 10.4 | ...... | ...... |
| 8 | ...... | 10.6 | 15.1 | 21.8 | 15.45 | 12.5 | 11.9 | 10.3 | ...... | ...... |
| 9 | ...... | 10.85 | 14.6 | 19.1 | 14.9 | 12.5 | 11.7 | 10.3 | ...... | ...... |
| 10 | ...... | 11.25 | 14.55 | 17.25 | 16.25 | 12.4 | 11.7 | 10.25 | ...... | ...... |
| 11 | ...... | 12.7 | 16.7 | 16.15 | 15.55 | 12.2 | 11.7 | 10.25 | ...... | ...... |
| 12 | ...... | 15.4 | 16.6 | 15.35 | 14.3 | 12.2 | 11.6 | 10.2 | ...... | ...... |
| 13 | ...... | 14.55 | 17.6 | 14.8 | 13.75 | 12.25 | 11.55 | 10.2 | ...... | ...... |
| 14 | ...... | 14.25 | 17.4 | 14.4 | 13.75 | 12.2 | 11.5 | 10.15 | ...... | ...... |
| 15 | ...... | 15.1 | 16.2 | 14.15 | 13.75 | 12.1 | 11.7 | 10.15 | ...... | ...... |
| 16 | ...... | 14.6 | 15.35 | 14.0 | 13.75 | 12.15 | 11.6 | 10.15 | ...... | ...... |
| 17 | ...... | 13.85 | 14.8 | 13.9 | 13.6 | 12.7 | 11.55 | 10.15 | ...... | ...... |
| 18 | 11.59 | 15.5 | 14.95 | 13.9 | 13.35 | 14.05 | 11.4 | 10.15 | ...... | ...... |
| 19 | 11.47 | 23.7 | 14.9 | 13.9 | 13.55 | 14.9 | 11.3 | 10.15 | ...... | ...... |
| 20 | 11.35 | 33.4 | 14.4 | 13.8 | 13.35 | 13.7 | 11.25 | 10.15 | ...... | ...... |
| 21 | 11.3 | 25.2 | 14.1 | 13.85 | 13.15 | 13.3 | 11.2 | 10.15 | ...... | ...... |
| 22 | 11.2 | 16.95 | 13.75 | 13.8 | 13.15 | 13.15 | 11.2 | 10.15 | ...... | ...... |
| 23 | 11.15 | 13.55 | 13.5 | 13.8 | 13.15 | 13.0 | 11.15 | 10.15 | ...... | ...... |
| 24 | 11.1 | 15.0 | 13.3 | 13.9 | 13.2 | 13.0 | 11.0 | 10.1 | ...... | 9.6 |
| 25 | 11.05 | 16.2 | 13.2 | 13.8 | 13.3 | 12.75 | 10.9 | 10.0 | ...... | 9.6 |
| 26 | 11.0 | 18.3 | 13.4 | 13.75 | 13.4 | 12.5 | 10.8 | 9.92 | ...... | 9.6 |
| 27 | 10.95 | 18.7 | 12.9 | 13.5 | 13.2 | 12.35 | 10.8 | 9.9 | ...... | 9.6 |
| 28 | 10.9 | 24.2 | 12.75 | 13.45 | 12.95 | 12.35 | 10.8 | ...... | 9.9 | 9.6 |
| 29 | 10.85 | 22.15 | ...... | 13.5 | 12.75 | 12.15 | 10.75 | ...... | ...... | 9.6 |
| 30 | 10.8 | 23.25 | ...... | 13.5 | 12.55 | 12.1 | 10.7 | ...... | ...... | 9.6 |
| 31 | 10.8 | 25.0 | ...... | 13.75 | ...... | 12.1 | ...... | ...... | ...... | ...... |

*[illegible] height, in feet, [illegible] River at [illegible] 1911–12 [illegible].*

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## [illegible] RIVER [illegible] COVELO, CAL.

[illegible] station, which [illegible] located below the highway bridge [illegible] [illegible] Finger station [illegible] sec. 3, T. [illegible] R. [illegible] W., [illegible] about 7 miles east of Covelo, was established August [illegible], 1911.

[illegible] gage [illegible] inclined staff, in two sections, on the left bank [illegible] one-fourth mile west of Finger station and [illegible] mile below [illegible] [illegible] The channel is composed of small bowlders and gravel and [illegible] permanent. Discharge measurements are made from [illegible] [illegible] side of the bridge or by wading. The discharge of [illegible] [illegible] which enters between the bridge and the gage, is added to [illegible] [illegible] of the gage.

[illegible] station is maintained in cooperation with the United States [illegible] Service, by which the gage-height record was furnished.

*[illegible] measurements of [illegible] River near Covelo, Cal., in 1911–12.*

| [illegible] | [illegible] | Gage height. | Discharge. | [illegible] | Hydrographer. | Gage height. | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | Feet. | Sec.-ft. | [illegible] | [illegible] | Feet. | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Mar. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible] made [illegible] bridge [illegible] north of Williams Creek. To get the low [illegible] [illegible] was added to discharge measurements as follows: [illegible] [illegible] second-feet; Mar. [illegible], [illegible] second-feet.

*Daily gage height, in feet, of Middle Eel River near Covelo, Cal., for 1911-12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | | 7.22 | 11 | | 7.25 | 21 | ........ | 7.18 |
| 2 | | 7.22 | 12 | | 7.25 | 22 | 7.40 | 7.20 |
| 3 | | 7.25 | 13 | | 7.25 | 23 | 7.30 | 7.20 |
| 4 | | 7.24 | 14 | | 7.25 | 24 | 7.22 | 7.19 |
| 5 | | 7.20 | 15 | | 7.25 | 25 | 7.30 | 7.22 |
| 6 | | 7.22 | 16 | | 7.25 | 26 | 7.25 | 7.22 |
| 7 | | 7.24 | 17 | | 7.24 | 27 | 7.28 | 7.28 |
| 8 | | 7.22 | 18 | | 7.21 | 28 | 7.24 | 7.28 |
| 9 | | 7.22 | 19 | | 7.20 | 29 | 7.22 | 7.31 |
| 10 | | 7.22 | 20 | | 7.18 | 30 | 7.21 | 7.30 |
| | | | | | | 31 | 7.22 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | April. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 7.30 | 7.30 | 7.50 | 7.9 | 10.2 | 9.6 | 10.4 | 14.5 | 11.0 |
| 2 | 7.29 | 7.30 | 7.55 | 7.9 | 10.2 | 9.5 | 10.35 | 12.6 | 10.9 |
| 3 | 7.30 | 7.29 | 7.60 | 8.0 | 10.0 | 9.4 | 10.4 | 12.7 | 10.7 |
| 4 | 7.30 | 7.30 | 7.60 | 8.1 | 10.0 | 9.4 | 10.2 | ........ | 10.5 |
| 5 | 7.31 | 7.29 | 7.60 | 8.1 | 10.0 | 9.5 | 10.2 | 12.8 | 10.4 |
| 6 | 7.20 | 7.30 | 7.75 | 8.1 | 10.0 | 10.4 | 10.35 | 13.1 | 10.2 |
| 7 | 7.28 | 7.30 | 8.00 | 9.0 | 10.8 | 10.4 | 10.3 | 13.0 | 10.0 |
| 8 | 7.31 | ........ | 7.95 | 9.5 | 12.3 | 10.2 | 10.4 | 12.8 | 10.0 |
| 9 | 7.32 | 7.35 | 7.85 | 10.3 | 11.2 | 10.0 | 10.3 | ........ | 9.8 |
| 10 | 7.40 | 8.25 | 7.80 | 9.8 | 10.9 | 9.8 | 11.4 | 12.1 | 9.7 |
| 11 | 7.40 | 8.08 | 7.80 | 9.5 | 10.9 | 9.8 | 11.1 | 12.1 | 9.6 |
| 12 | 7.35 | 7.80 | 7.70 | 9.3 | 10.8 | 10.0 | 10.7 | 12.1 | 9.6 |
| 13 | 7.38 | 7.72 | 7.70 | 9.6 | 10.6 | 9.8 | 10.5 | 11.6 | 9.5 |
| 14 | 7.35 | 7.70 | 7.70 | 10.3 | 10.5 | 9.9 | 10.6 | 11.6 | 9.5 |
| 15 | 7.34 | 8.15 | 7.65 | 10.0 | 10.6 | 10.6 | 10.6 | 11.4 | 9.5 |
| 16 | 7.32 | 8.85 | 7.72 | 10.0 | 10.7 | 10.3 | 10.6 | 11.0 | 9.4 |
| 17 | 7.30 | 8.30 | 7.88 | 9.7 | 15.0 | 10.3 | 10.6 | 10.9 | 9.1 |
| 18 | 7.30 | 8.15 | 7.65 | 9.5 | 13.3 | 10.4 | 10.5 | 10.8 | 9.1 |
| 19 | 7.28 | 8.02 | 7.70 | 9.35 | 12.1 | 10.4 | 10.4 | 10.8 | 9.1 |
| 20 | 7.28 | 8.05 | 7.70 | 9.3 | 11.4 | 10.5 | 10.3 | 11.0 | 9.1 |
| 21 | 7.28 | 7.95 | 7.70 | 9.3 | 11.1 | 10.5 | 10.1 | 10.7 | 9.1 |
| 22 | 7.28 | 7.84 | 7.70 | 9.3 | 10.6 | 10.6 | 10.0 | 10.8 | 9.0 |
| 23 | 7.28 | 7.80 | 7.70 | 9.3 | 10.4 | 10.7 | 10.1 | 10.8 | 9.0 |
| 24 | 7.28 | 7.74 | 7.72 | 11.0 | 10.2 | 10.3 | 10.15 | 11.4 | 9.0 |
| 25 | 7.26 | 7.70 | 7.75 | 18.6 | 10.0 | 10.7 | 10.1 | 12.6 | 9.0 |
| 26 | 7.30 | 7.70 | 7.78 | 15.6 | 9.7 | 10.4 | 10.1 | 12.0 | 8.95 |
| 27 | 7.30 | 7.68 | 7.95 | 13.0 | 9.7 | 10.7 | 10.0 | 11.9 | 8.9 |
| 28 | 7.30 | 7.65 | 8.00 | 12.9 | 9.6 | 11.0 | 10.6 | 11.7 | 8.8 |
| 29 | 7.35 | 7.64 | 7.85 | 10.9 | 9.6 | 11.2 | 12.6 | 11.5 | 8.8 |
| 30 | 7.35 | 7.60 | 7.85 | 10.6 | ........ | 10.6 | 13.5 | 11.5 | 8.75 |
| 31 | 7.31 | ........ | 7.95 | 10.4 | ........ | 10.4 | ........ | 11.3 | ........ |

## SOUTH FORK OF EEL RIVER AT GARBERVILLE, CAL.

This station, which is located at the highway bridge in the SW. ¼ sec. 24, T. 4 S., R. 3 E., about a mile southwest of Garberville, was established August 25, 1911.

A chain gage is used and is on the downstream side of the bridge. The channel is composed of bowlders and gravel and will probably shift slightly during high water. Discharge measurements are made from the bridge or by wading.

Discharge estimates are withheld until additional data are available.

[illegible] 1911–[illegible]

| [illegible] | | | | | Gross [illegible] | [illegible] |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

### VAN DUZEN RIVER AT BRIDGEVILLE, CAL.

This station, which is located just below the highway bridge at Bridgeville, in the NW. ¼ sec. 13, T. 1 N., R. 3 E., was established September 22, 1911.

The gage is a staff, in two sections, on the right bank just below bridge. The channel is composed of gravel and will probably shift during high water. The drainage area above the station is 194 square miles. Discharge measurements are made from a car and cable 90 feet below the gage or by wading.

Discharge estimates are withheld until additional data are available.

*Discharge measurements of Van Duzen River at Bridgeville, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 22 | E. O. Christiansen | 4.50 | 6.9 | Jan. 27 | E. O. Christiansen | 12.94 | 4,910 |
| Oct. 19 | .....do | 4.71 | 12 | Mar. 12 | .....do | 8.70 | 1,320 |
| 1912. | | | | Apr. 26 | .....do | 7.35 | 569 |
| | | | | 27 | .....do | 7.25 | 515 |
| Jan. 6 | E. O. Christiansen | 6.02 | 156 | June 7 | .....do | 6.66 | 281 |

*Daily gage height, in feet, of Van Duzen River at Bridgeville, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | | 4.59 | 4.64 | 4.90 | 6.0 | 8.0 | 6.55 | 7.4 | 17.2 | 7.1 |
| 2 | | 4.60 | 4.65 | 4.90 | 5.88 | 7.9 | 6.5 | 7.4 | 13.4 | 7.0 |
| 3 | | 4.62 | 4.66 | 4.89 | 5.8 | 7.75 | 6.5 | 7.25 | 10.8 | 6.9 |
| 4 | | 4.66 | 4.65 | 4.88 | 5.8 | 7.55 | 6.4 | 7.0 | 9.6 | 6.9 |
| 5 | | 4.66 | 4.63 | 5.12 | 5.85 | 7.5 | 9.2 | 7.0 | 8.9 | 6.9 |
| 6 | | 4.64 | 4.65 | 5.46 | 6.05 | 7.6 | 10.4 | 7.0 | 8.8 | 6.9 |
| 7 | | 4.61 | 4.67 | 5.80 | 9.8 | 8.0 | 9.4 | 7.0 | 8.6 | 6.75 |
| 8 | | 4.62 | 4.72 | 5.47 | 8.2 | 9.0 | 9.6 | 7.0 | 8.4 | 6.7 |
| 9 | | 4.81 | 5.12 | 5.36 | 10.0 | 8.6 | 9.4 | 7.0 | 8.2 | 6.6 |
| 10 | | 4.88 | 5.65 | 5.24 | 9.8 | 8.7 | 8.4 | 6.9 | 7.95 | 6.5 |
| 11 | | 4.81 | 5.61 | 5.18 | 9.3 | 8.5 | 8.0 | 7.0 | 7.75 | 6.5 |
| 12 | | 4.79 | 5.61 | 5.06 | 8.9 | 8.4 | 8.4 | 7.0 | 7.65 | 6.5 |
| 13 | | 4.75 | 5.46 | 4.92 | 10.8 | 8.8 | 8.2 | 7.15 | 7.5 | 6.5 |
| 14 | | 4.82 | 5.48 | 5.05 | 9.2 | 8.4 | 8.0 | 7.0 | 7.45 | 6.5 |
| 15 | | 4.88 | 6.30 | 5.25 | 8.2 | 8.3 | 10.0 | 7.0 | 7.2 | 6.5 |
| 16 | | 4.78 | 6.50 | 5.50 | 7.75 | 10.8 | 10.0 | 7.0 | 7.15 | 6.48 |
| 17 | | 4.77 | 6.05 | 5.60 | 7.4 | 14.4 | 9.5 | 6.9 | 7.05 | 6.38 |
| 18 | | 4.74 | 5.62 | 5.56 | 7.7 | 12.6 | 9.0 | 6.8 | 7.0 | 6.28 |
| 19 | | 4.70 | 5.48 | 5.62 | 7.8 | 10.8 | 8.6 | 6.8 | 7.1 | 6.19 |
| 20 | | 4.69 | 5.32 | 5.65 | 7.6 | 9.1 | 8.3 | 6.8 | 7.55 | 6.12 |
| 21 | | 4.65 | 5.25 | 5.55 | 7.2 | 8.6 | 8.1 | 6.7 | 7.8 | 6.1 |
| 22 | 4.51 | 4.65 | 5.16 | 5.62 | 7.05 | 8.0 | 7.95 | 6.7 | 7.8 | 6.0 |
| 23 | 4.51 | 4.65 | 5.05 | 5.68 | 7.0 | 7.95 | 7.95 | 6.75 | 8.2 | 6.08 |
| 24 | 4.51 | 4.66 | 5.04 | 5.72 | 13.9 | 7.65 | 7.9 | 7.1 | 8.6 | 6.08 |
| 25 | 4.51 | 4.68 | 5.01 | 5.62 | 24.1 | 7.5 | 7.9 | 7.4 | 8.7 | 6.04 |
| 26 | 4.53 | 4.69 | 4.96 | 5.60 | 18.0 | 7.3 | 7.85 | 7.45 | 8.5 | 6.01 |
| 27 | 4.59 | 4.67 | 4.91 | 6.40 | 13.6 | 7.0 | 7.8 | 7.15 | 8.4 | 6.0 |
| 28 | 4.59 | 4.65 | 4.91 | 6.20 | 10.8 | 7.0 | 7.75 | 7.7 | 7.95 | 5.98 |
| 29 | 4.59 | 4.65 | 4.90 | 6.00 | 9.9 | 6.85 | 7.7 | 16.8 | 7.75 | 5.98 |
| 30 | 4.59 | 4.66 | 4.90 | 5.95 | 9.1 | | 7.55 | 15.5 | 7.4 | 5.95 |
| 31 | 4.59 | 4.68 | | 6.00 | 8.4 | | 7.45 | | 7.25 | |

NOTE.—Jan. 25, maximum recorded gage height, 26.0 feet at 4.55 p. m.

## [illegible]

[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

[illegible]

*Daily gage height, in feet, of Yager Creek at Carlotta, Cal., for 1911–12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 21 | 5.6 | 5.7 | 6.3 | 6.78 | 8.15 | 7.7 | 6.95 | 7.35 | 6.51 |
| 22 | 5.6 | 5.6 | 6.25 | 6.68 | 7.85 | 7.49 | 6.9 | 7.38 | 6.50 |
| 23 | 5.6 | 5.6 | 6.35 | 6.62 | 7.9 | 7.36 | 6.9 | 7.39 | 6.68 |
| 24 | 5.6 | 5.6 | 6.75 | 8.9 | 7.65 | 7.29 | 6.88 | 7.5 | 6.75 |
| 25 | 5.6 | 5.6 | 6.45 | 14.7 | 7.48 | 7.22 | 7.35 | 7.42 | 6.62 |
| 26 | 5.6 | 5.6 | 6.4 | 12.2 | 7.38 | 7.13 | 7.75 | 7.34 | 6.60 |
| 27 | 5.6 | 5.6 | 7.0 | 10.1 | 7.28 | 7.03 | 7.65 | 7.42 | 6.60 |
| 28 | 5.6 | 5.6 | 7.75 | 9.1 | 7.18 | 6.94 | 7.7 | 7.30 | 6.58 |
| 29 | 5.6 | 5.6 | 7.0 | 8.5 | 7.14 | 6.92 | 12.6 | 7.26 | 6.55 |
| 30 | 5.6 | 5.6 | 6.8 | 7.95 | | 6.90 | 11.0 | 7.21 | 6.55 |
| 31 | 5.6 | | 7.5 | 7.65 | | 6.78 | | 7.15 | |

NOTE.—Jan. 25, 1912, maximum recorded gage height, 15.7 feet at 4 p. m.

## MISCELLANEOUS MEASUREMENTS.

The following miscellaneous measurements have been made in the Eel River basin:

*Miscellaneous measurements in Eel River drainage basin.*

| Date. | Stream. | Locality. | Discharge. |
|---|---|---|---|
| | | | *Sec.-ft.* |
| Oct. 21, 1903 | Eel River | Near Stingleys station | 189 |
| Sept. 20, 1905 | do | Laytonville | 27 |
| Aug. 15, 1910 | do | Dyerville | 28 |
| Sept. 19, 1905 | Eel River, Middle | Covelo | 7 |
| Sept. 20, 1905 | do | Laytonville | 8 |
| Aug. 14, 1910 | do | Just above junction with South Eel | 8.3 |
| Sept. 3, 1905 | Eel River, South | Just above Preston | 5.5 |
| Sept. 19, 1905 | do | Hearst | 9.5 |
| Sept. 20, 1905 | do | Laytonville | 19.2 |
| Aug. 14, 1910 | do | Just above junction with Middle Eel | 5.3 |
| Nov. 5, 1911 | Burger Creek | Road crossing, sec. 10, T. 21 N., R. 14 W | [a].25 |
| Nov. 16, 1911 | do | do | [a]1.00 |
| Jan. 16, 1912 | do | do | [a]5 |
| Feb. 1, 1912 | do | do | [a]3 |
| Apr. 2, 1912 | do | do | [a]3 |
| Nov. 4, 1911 | Tomki Creek | Road crossing, sec. 26, T. 19 N., R. 13 W | Dry. |
| Apr. 4, 1912 | do | do | 4 |
| Apr. 3, 1912 | Outlet Creek | Above Long Valley Creek, sec. 33, T. 20 N., R. 14 W. | 61 |
| Do | Long Valley Creek | Mouth | [a]4 |
| Sept. 5, 1910 | South Fork of Eel River | 1 mile south of Garberville | 38 |
| Aug. 15, 1910 | do | Near mouth at Dyerville | 36 |
| May 28, 1912 | Buck Creek | Garberville | [a].5 |
| Nov. 19, 1911 | Redwood Creek | Briceland, SW. ¼ sec. 18, T. 45, R. 3 E | [a].5 |
| Jan. 15, 1912 | do | do | 3.0 |
| May 27, 1912 | do | do | [a]2.0 |
| May 28, 1912 | Bohne Creek | Highway bridge, SW. ¼ sec. 1, T. 45, R. 3 E | 20 |
| Mar 8, 1912 | Bear Creek | Highway bridge, 3 miles north of Garberville | [a]5 |
| Mar. 18, 1912 | Rocky Glen Creek | Highway bridge near mouth, SW. ¼ sec. 19, T. 35, R. 4 E. | [a]3 |
| May 28, 1912 | do | do | 13 |
| Do | Elk Creek | Below highway bridge near Miranda NW. ¼, sec. 21, T. 35, R. 3 E. | 12 |
| May 29, 1912 | Bear Creek | Near mouth near Dyerville, NW. ¼ sec. 32, T. 1 N., R. 2 E. | 16 |
| Do | Monument Creek | Highway bridge near Rio Dell, sec. 18, T. 1 N., R. 1 E. | 13 |
| Aug. 15, 1910 | Van Duzen River | ¼ mile south of Alton | 5.1 |
| June 7, 1912 | Little Larabee Creek | Near Bridgeville, sec. 7, T. 1 N., R. 3 E | 9.3 |
| Sept. 22, 1911 | Grizzly Creek | Near mouth, sec. 11, T. 1 N., R. 2 E | [a].25 |
| Oct. 19, 1911 | do | do | [a].25 |
| Jan. 6, 1912 | do | do | [a]3.0 |
| Apr. 27, 1912 | do | do | [a]2.0 |
| June 7, 1912 | do | do | [a]1.0 |
| Sept. 22, 1911 | Healy Creek | Near mouth, road from Carlotta to Bridgeville | [a].1 |
| Oct. 19, 1911 | do | do | [a].2 |
| June 7, 1912 | do | do | [a]1.0 |
| Do | Salmon Creek | do | [a]1.0 |
| Sept. 21, 1911 | Lawrence Creek | 500 feet below Booth Run | 1.5 |

[a] Estimated.

[illegible]

[illegible] located [illegible] sec. 2, T. 39 S., R. 9 E., at the [illegible] Klamath Falls, 1½ miles below the [illegible] and immediately at the head of Lake [illegible] 1904. The river has a fall of 56 [illegible] portion of which is utilized [illegible]

[illegible] individual daily [illegible] for longer periods—a [illegible] determined is not greatly in error. [illegible] flow of [illegible] was located at the bridge [illegible] Upper Klamath [illegible]

[illegible]

Water is diverted in the Keno canal around the Friez gage. Part of this is used to supply the power plant operated by Moore Bros., and the remainder is wasted at a spillway. Both power plant and spillway are located above the bridge and below the Friez gage. All water therefore passes the bridge gage and is included in the discharge measurements, but does not pass the Friez gage. There is no record of the amount of water diverted, except a few miscellaneous measurements which do not include the water wasted into the spillway.

This station was maintained after January 1, 1910, by the United States Reclamation Service, but the daily and monthly discharge tables were computed by the United States Geological Survey.

*Discharge measurements of Link River near Klamath Falls, Oreg., in 1904–1909.*

Gage at bridge.

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-ft.* |
| May 15 | Lewis and Landes | 7.15 | 9,073 |
| June 7 | do | 6.55 | 7,342 |
| Aug. 25 | T. H. Humphreys | 3.70 | 1,915 |
| Sept. 16 | C. T. Darley | 3.40 | 1,782 |
| 28 | do | 3.30 | 2,005 |
| Oct. 18 | do | 3.40 | 2,135 |
| Nov. 8 | do | 3.50 | 1,968 |
| 24 | do | 3.60 | 1,898 |
| 1905. | | | |
| Jan. 4 | C. T. Darley | 4.05 | 2,862 |
| 17 | do | 4.10 | 2,768 |
| 17 | do | 4.10 | 2,572 |
| 17 | do | 4.10 | 2,627 |
| Feb. 1 | do | 4.30 | 3,338 |
| 13 | do | 4.50 | 2,994 |
| 17 | do | 4.40 | 2,802 |
| Mar. 2 | do | 4.40 | 2,964 |
| Apr. 12 | do | 4.49 | 3,645 |
| June 5 | do | 3.88 | 2,324 |
| 20 | do | 3.59 | 1,800 |
| 28 | do | 3.40 | 1,517 |
| July 11 | do | 3.14 | 1,466 |
| 18 | do | 2.97 | 1,063 |
| 28 | do | 2.80 | 1,049 |
| Aug. 7 | do | 2.63 | 1,041 |
| 14 | do | 2.59 | 1,066 |
| 16 | Clapp and Darley | 2.60 | 1,104 |
| Sept. 7 | C. T. Darley | 2.58 | 1,032 |
| 16 | do | 2.58 | 1,073 |
| Nov. 2 | do | 2.90 | 1,283 |
| 1906. | | | |
| May 11 | L. F. Hendricks | 5.06 | 4,560 |
| June 20 | do | 4.65 | 3,400 |
| 22 | Clapp and Hendricks | 4.65 | 3,640 |
| July 9 | L. F. Hendricks | 4.25 | 2,860 |
| 24 | do | 3.80 | 2,190 |
| Aug. 22 | do | 3.00 | 1,390 |
| Dec. 20 | do | 3.48 | 2,050 |
| 1907. | | | |
| Jan. 10 | L. F. Hendricks | 3.80 | 2,300 |
| Feb. 18 | do | 4.90 | 4,910 |
| Mar. 2 | do | 5.00 | 4,980 |
| Apr. 1 | do | 5.60 | 5,690 |
| 20 | do | 5.80 | 5,570 |
| May 9 | Stevens and Ellsworth | 5.65 | 4,000 |
| 23 | J. C. Stevens | 5.30 | 4,220 |
| June 13 | C. E. Ellsworth | 4.98 | 4,390 |
| 19 | do | 4.85 | 3,740 |
| July 5 | do | 4.35 | 2,450 |
| 23 | do | 3.85 | 1,950 |
| 31 | do | 3.65 | 1,640 |
| Aug. 12 | do | 3.40 | 1,610 |
| Sept. 4 | do | 3.15 | 1,640 |
| 19 | do | 3.05 | 1,490 |
| Oct. 26 | do | 3.25 | 1,870 |
| Nov. 13 | do | 3.32 | 1,830 |
| 1908. | | | |
| Feb. 17 | C. E. Ellsworth | 4.19 | 3,030 |
| Mar. 14 | do | 4.20 | 2,800 |
| 21 | do | 4.15 | 2,890 |
| Apr. 3 | do | 4.36 | 3,800 |
| 15 | do | 4.26 | 2,620 |
| 18 | do | 4.18 | 2,700 |
| 21 | do | 4.28 | 2,610 |
| 25 | Ellsworth and Kimble | 4.16 | 2,820 |
| 30 | do | 4.16 | 2,670 |
| May 5 | do | 4.11 | 2,560 |
| 9 | H. Kimble | 4.02 | 2,620 |
| 13 | do | 4.07 | 2,680 |
| 18 | do | 4.03 | 2,170 |
| 21 | do | 4.04 | 2,980 |
| 25 | do | 3.94 | 2,530 |
| 30 | do | 3.87 | 2,910 |
| June 4 | do | 3.76 | 2,290 |
| 13 | do | ........ | 2,000 |

*Discharge measurements of Link River near Klamath Falls, Oreg., in 1904–1909*—Contd.

**Prize gage.**

| Date. | | Hydrographer. | Gage height. | Discharge. | Date. | | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | *Feet.* | *Sec.-ft.* | 1908. | | | *Feet.* | *Sec.-ft.* |
| June | 17 | H. Kimble | 1.86 | 2,110 | Oct. | 13 | H. Kimble | 1.20 | 1,190 |
| | 23 | do | | 1,710 | | 25 | do | 1.39 | 1,740 |
| | 30 | do | 1.85 | 1,780 | | 31 | do | 1.40 | 1,750 |
| July | 1 | do | 1.57 | 1,620 | Nov. | 13 | do | 1.65 | 1,870 |
| | 7 | do | 1.42 | 1,570 | Dec. | 7 | do | 1.64 | 1,830 |
| | 9 | do | 1.44 | 1,530 | | | | | |
| | 13 | do | 1.70 | 1,920 | 1909. | | | | |
| | 19 | do | 1.33 | 1,330 | Feb. | 16 | Howard Kimble | 2.58 | 3,420 |
| | 22 | do | 1.30 | 1,300 | Apr. | 17 | do | 2.64 | 3,440 |
| | 28 | do | 1.29 | 1,210 | May | 26 | Kimble and Geiger | 2.34 | 2,760 |
| Aug. | 14 | do | 1.30 | 1,250 | | 28 | A. H. Geiger | 2.02 | 2,440 |
| Sept. | 1 | do | .75 | 715 | June | 23 | do | 2.03 | 2,330 |
| | 16 | do | 1.12 | 1,190 | Sept. | 9 | John Yadon | | 1,040 |
| | 29 | do | .92 | 935 | | | | | |

*Discharge measurements of Link River at Klamath Falls, Oreg., in 1910–11.*

| Date. | | Hydrographer. | Gage height. | | Discharge. |
|---|---|---|---|---|---|
| | | | Gage at bridge. | Prize gage. | |
| 1910. | | | *Feet.* | *Feet.* | *Sec.-ft.* |
| Mar. | 17 | John Yadon | 5.08 | 3.20 | 4,330 |
| July | 29 | do | 2.90 | a1.10 | 1,1[illegible] |
| Aug. | 25 | Leland Moser | 2.57 | a.92 | 1,1[illegible] |
| Dec. | 12 | do | 3.90 | a2.30 | 3,32[illegible] |
| | 18 | do | 4.12 | a2.48 | 3,6[illegible] |
| | 28 | do | 4.15 | a2.29 | 3,240 |
| 1911. | | | | | |
| Jan. | 7 | Leland Moser | 4.12 | 2.14 | 3,010 |
| June | 1 | do | 4.88 | 2.55 | 3,530 |
| | 28 | do | 4.40 | 2.22 | 2,972 |
| July | 1 | do | 4.18 | 1.83 | 2,250 |
| Aug. | 27 | do | 2.69 | 1.69 | 1,280 |
| Nov. | 21 | do | 3.06 | 1.50 | 1,920 |

a Automatic gage not read at time of measurement. This gage height is the mean for the day.

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912.*

**Gage at bridge.**

| Day. | May. | June. | July. | Aug. | Sept. | Day. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | | | 1904. | | | | | |
| 1 | | 6.75 | 5.5 | 4.35 | 3.5 | 16 | 7.1 | 6.25 | 5.0 | 3.90 | 3.35 |
| 2 | | 6.9 | 5.45 | 4.3 | 3.5 | 17 | 7.1 | 6.2 | 4.95 | 3.85 | 3.35 |
| 3 | | 6.7 | 5.4 | 4.25 | 3.5 | 18 | 7.15 | 6.1 | 4.9 | 3.85 | 3.3 |
| 4 | | 6.7 | 5.4 | 4.2 | 3.45 | 19 | 7.1 | 6.05 | 4.85 | 3.8 | 3.3 |
| 5 | | 6.65 | 5.35 | 4.2 | 3.45 | 20 | 7.1 | 6.0 | 4.8 | 3.8 | 3.3 |
| 6 | | 6.6 | 5.3 | 4.15 | 3.45 | 21 | 7.1 | 6.0 | 4.8 | 3.75 | 3.3 |
| 7 | | 6.55 | 5.3 | 4.15 | 3.45 | 22 | 7.05 | 5.95 | 4.75 | 3.75 | 3.45 |
| 8 | | 6.55 | 5.25 | 4.15 | 3.45 | 23 | 7.0 | 5.85 | 4.75 | 3.7 | 3.4 |
| 9 | | 6.5 | 5.25 | 4.1 | 3.4 | 24 | 7.0 | 5.8 | 4.75 | 3.7 | 3.35 |
| 10 | | 6.45 | 5.2 | 4.05 | 3.4 | 25 | 6.95 | 5.75 | 4.7 | 3.7 | 3.3 |
| 11 | | 6.4 | 5.2 | 4.05 | 3.4 | 26 | 6.9 | 5.75 | 4.65 | 3.65 | 3.3 |
| 12 | | 6.4 | 5.15 | 4.0 | 3.4 | 27 | 6.9 | 5.7 | 4.6 | 3.65 | 3.35 |
| 13 | | 6.35 | 5.1 | 4.0 | 3.35 | 28 | 6.9 | 5.65 | 4.55 | 3.6 | 3.3 |
| 14 | | 6.3 | 5.1 | 3.95 | 3.35 | 29 | 6.85 | 5.6 | 4.5 | 3.55 | 3.2 |
| 15 | 7.15 | 6.3 | 5.05 | 3.95 | 3.35 | 30 | 6.85 | 5.55 | 4.45 | 3.55 | 3.2 |
| | | | | | | 31 | 6.8 | | 4.4 | 3.55 | |

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912*—Contd.

**Gage at bridge.**

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 1 | 3.3 | 3.5 | 3.55 | 4.1 | 4.2 | 4.4 | 4.5 | 4.2 | 3.95 | 3.45 | 2.79 | 2.6 |
| 2 | 3.3 | 3.45 | 3.6 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.85 | 3.45 | 2.75 | 2.6 |
| 3 | 3.3 | 3.45 | 3.6 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.85 | 3.3 | 2.7 | 2.58 |
| 4 | 3.3 | 3.45 | 3.6 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.9 | [a]3.3 | 2.67 | 2.6 |
| 5 | 3.3 | 3.45 | 3.65 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.88 | 3.25 | 2.67 | 2.58 |
| 6 | 3.3 | 3.5 | 3.7 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.88 | 3.3 | 2.67 | 2.6 |
| 7 | 3.3 | 3.5 | 3.7 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.81 | 3.2 | 2.5 | 2.58 |
| 8 | 3.35 | 3.5 | 3.7 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.88 | 3.2 | 2.63 | 2.58 |
| 9 | 3.4 | 3.5 | 3.7 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.85 | [a]3.25 | 2.6 | 2.58 |
| 10 | 3.4 | 3.5 | 3.7 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.8 | 3.25 | 2.6 | 2.62 |
| 11 | 3.4 | 3.55 | 3.7 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.8 | [a]3.25 | 2.59 | 2.63 |
| 12 | 3.35 | 3.55 | 3.7 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.78 | [a]3.2 | 2.6 | 2.58 |
| 13 | 3.35 | 3.6 | 3.75 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.75 | 3.2 | 2.6 | 2.58 |
| 14 | 3.4 | 3.5 | 3.75 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.7 | 3.1 | 2.59 | 2.6 |
| 15 | 3.4 | 3.5 | 3.8 | 4.1 | 4.5 | 4.4 | 4.5 | 4.1 | 3.6 | 3.05 | 2.6 | 2.6 |
| 16 | 3.45 | 3.5 | 3.8 | 4.1 | 4.5 | 4.4 | 4.5 | 4.1 | 3.7 | [a]3.0 | 2.6 | 2.55 |
| 17 | 3.4 | 3.5 | 3.8 | 4.1 | 4.4 | 4.4 | 4.5 | 4.1 | 3.62 | 2.9 | 2.60 | 2.5 |
| 18 | 3.4 | 3.5 | 3.8 | 4.1 | 4.4 | 4.4 | 4.45 | 4.05 | [a]3.61 | 2.9 | 2.63 | 2.55 |
| 19 | 3.45 | 3.55 | 3.8 | 4.1 | 4.4 | 4.4 | 4.4 | 4.05 | 3.6 | 3.0 | 2.6 | 2.6 |
| 20 | 3.45 | 3.5 | 3.8 | 4.1 | 4.4 | 4.4 | 4.4 | 4.05 | 3.59 | 2.9 | 2.6 | 2.6 |
| 21 | 3.45 | 3.5 | 3.8 | 4.1 | 4.4 | 4.4 | 4.35 | 4.0 | [a]3.55 | 2.9 | 2.6 | 2.6 |
| 22 | 3.45 | 3.55 | 3.85 | 4.1 | 4.4 | 4.4 | 4.35 | 4.0 | 3.5 | 2.95 | 2.6 | 2.58 |
| 23 | 3.45 | 3.55 | 3.9 | 4.1 | 4.4 | 4.4 | 4.35 | 4.0 | 3.5 | 2.85 | 2.6 | 2.6 |
| 24 | 3.45 | 3.6 | 3.95 | 4.2 | 4.4 | 4.4 | 4.3 | 4.0 | 3.5 | 2.85 | 2.6 | 2.68 |
| 25 | 3.45 | 3.6 | ...... | 4.2 | 4.4 | 4.4 | 4.3 | 4.0 | 3.4 | [a]2.85 | 2.6 | 2.55 |
| 26 | 3.45 | 3.6 | ...... | 4.2 | 4.4 | 4.4 | 4.3 | 4.0 | 3.4 | [a]2.85 | 2.7 | 2.58 |
| 27 | 3.45 | 3.6 | ...... | 4.2 | 4.4 | 4.4 | 4.3 | 4.0 | 3.4 | [a]2.8 | 2.8 | 2.6 |
| 28 | 3.45 | 3.6 | ...... | 4.1 | 4.4 | 4.5 | 4.25 | 4.0 | 3.4 | [a]2.8 | 2.6 | 2.62 |
| 29 | 3.45 | 3.6 | ...... | 4.2 | ...... | 4.6 | 4.25 | 4.0 | 3.4 | 2.78 | 2.6 | 2.65 |
| 30 | 3.45 | 3.65 | ...... | 4.2 | ...... | 4.5 | 4.25 | 3.95 | 3.35 | 2.79 | 2.65 | 2.65 |
| 31 | 3.45 | ...... | ...... | 4.2 | ...... | 4.5 | ...... | 3.95 | ...... | 2.78 | 2.55 | ...... |
| **1905–6.** | | | | | | | | | | | | |
| 1 | 2.7 | 2.81 | 3.25 | 3.5 | 3.65 | 3.75 | 4.25 | 5.0 | 4.85 | 4.4 | 3.5 | 2.9 |
| 2 | 2.65 | 2.8 | 3.3 | 3.45 | 3.65 | 3.9 | 4.2 | 5.05 | 4.85 | 4.35 | 3.5 | 2.85 |
| 3 | 2.7 | 2.81 | 3.29 | 3.4 | 3.65 | 3.85 | 4.2 | 5.0 | 4.9 | 4.4 | 3.5 | 2.9 |
| 4 | 2.7 | 2.84 | 3.2 | 3.5 | 3.65 | 3.7 | 4.2 | 4.95 | 4.9 | 4.4 | 3.45 | 2.9 |
| 5 | 2.9 | 2.82 | 3.2 | 3.5 | 3.65 | 3.7 | 4.2 | 5.0 | 4.95 | 4.3 | 3.45 | 2.9 |
| 6 | 2.9 | 2.88 | 3.2 | 3.45 | 3.6 | 3.7 | 4.3 | 5.0 | 4.8 | 4.3 | 3.4 | 2.85 |
| 7 | 2.95 | 2.86 | 3.21 | 3.45 | 3.6 | 3.7 | 4.35 | 4.95 | 4.8 | 4.25 | 3.35 | 2.95 |
| 8 | 2.7 | 2.99 | 3.23 | 3.45 | 3.6 | 3.7 | 4.45 | 4.95 | 4.85 | 4.3 | 3.3 | 2.95 |
| 9 | 2.9 | 2.99 | 3.24 | 3.5 | 3.6 | 3.75 | 4.4 | 5.0 | 4.8 | 4.25 | 3.3 | [a]2.9 |
| 10 | 2.8 | 2.98 | 3.28 | 3.5 | 3.6 | 3.75 | 4.5 | 5.05 | 4.95 | 4.2 | 3.3 | 2.8 |
| 11 | 2.75 | 2.99 | 3.25 | 3.5 | 3.6 | 3.7 | 4.5 | 5.05 | 5.0 | 4.15 | 3.3 | 2.8 |
| 12 | 2.8 | 2.9 | 3.26 | 3.5 | 3.6 | 3.85 | 4.5 | 4.9 | 4.9 | 4.15 | 3.2 | 2.85 |
| 13 | 2.8 | 2.95 | 3.27 | 3.5 | 3.6 | 3.9 | 4.55 | 4.9 | 4.75 | 4.15 | 3.15 | 2.8 |
| 14 | 2.8 | 2.95 | 3.24 | 3.6 | 3.6 | 3.9 | 4.6 | 5.1 | 4.7 | 4.05 | 3.2 | 2.8 |
| 15 | 2.7 | 2.95 | 3.34 | 3.55 | 3.65 | 3.95 | 4.65 | 5.0 | 4.8 | 4.05 | 3.15 | 2.8 |
| 16 | 2.8 | 2.9 | 3.26 | 3.8 | 3.6 | 3.9 | 4.75 | 4.9 | 4.75 | 4.05 | 3.15 | 2.85 |
| 17 | 2.8 | 2.9 | 3.33 | 3.8 | 3.65 | 3.9 | 4.8 | 4.9 | 4.7 | 4.05 | 3.15 | 2.85 |
| 18 | 2.8 | 2.9 | 3.32 | 3.8 | 3.75 | 3.95 | 4.8 | 5.15 | 4.65 | 4.00 | 3.1 | 2.85 |
| 19 | 2.8 | 3.2 | 3.32 | 3.85 | 3.65 | 3.9 | 4.8 | 4.95 | 4.6 | 3.95 | 3.1 | 2.85 |
| 20 | 2.85 | 3.1 | 3.26 | 3.8 | 3.65 | 3.95 | 4.85 | 4.9 | 4.65 | 3.95 | 3.05 | 2.85 |
| 21 | 2.85 | 3.3 | 3.27 | 3.85 | 3.7 | 4.0 | 4.9 | 4.85 | 4.55 | 3.95 | 3.1 | 2.85 |
| 22 | 2.79 | 3.2 | 3.33 | 3.7 | 3.7 | 3.95 | 4.95 | 4.8 | 4.6 | 3.85 | 3.0 | 2.8 |
| 23 | 2.8 | 3.15 | 3.3 | 3.75 | 3.75 | 4.15 | 5.0 | 4.85 | 4.6 | 3.8 | 2.95 | 2.8 |
| 24 | 2.85 | 3.1 | 3.32 | 3.75 | 3.7 | 3.95 | 4.95 | 4.9 | 4.6 | 3.75 | 3.0 | 2.9 |
| 25 | 2.81 | 3.2 | 3.29 | 3.7 | 3.7 | 4.05 | 4.95 | 5.1 | 4.55 | 3.75 | 3.0 | 2.9 |
| 26 | 2.8 | 3.25 | 3.35 | 3.7 | 3.85 | 4.0 | 4.95 | 5.0 | 4.55 | 3.7 | 3.05 | 2.85 |
| 27 | 2.89 | 3.15 | 3.36 | 3.7 | 3.7 | 4.0 | 5.05 | 4.95 | 4.5 | 3.65 | 3.0 | 2.85 |
| 28 | 2.88 | 3.15 | 3.33 | 3.7 | 3.6 | 4.05 | 5.1 | 5.0 | 4.5 | 3.7 | 2.9 | 2.85 |
| 29 | 2.88 | 3.4 | 3.4 | 3.7 | ...... | 4.1 | 5.0 | 4.9 | 4.45 | 3.6 | 3.0 | 2.85 |
| 30 | 2.81 | 3.2 | 3.53 | 3.7 | ...... | 4.2 | 4.95 | 4.9 | 4.45 | 3.55 | 2.9 | 2.85 |
| 31 | 2.9 | ...... | 3.53 | 3.65 | ...... | 4.2 | ...... | 4.9 | ...... | 3.55 | 2.9 | ...... |

[a] Estimated.

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912*—Contd.

**Gage at bridge.**

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | 1908. | | | | 1908. | | | |
| 1 | 2.58 | 3.19 | 3.37 | 11 | ...... | ...... | 3.40 | 21 | ...... | 3.30 | ...... |
| 2 | ...... | 3.26 | 3.38 | 12 | ...... | 3.23 | 3.34 | 22 | 3.11 | 3.30 | 3.48 |
| 3 | 2.51 | 3.20 | 3.40 | 13 | 2.75 | 3.25 | 3.47 | 23 | 3.11 | 3.32 | ...... |
| 4 | 2.59 | 3.17 | 3.44 | 14 | ...... | 3.25 | 3.41 | 24 | 3.14 | 3.35 | 3.48 |
| 5 | 2.55 | 3.20 | 3.43 | 15 | ...... | 3.27 | 3.40 | 25 | 3.23 | 3.35 | 3.50 |
| 6 | 2.58 | 3.18 | 3.43 | 16 | 3.01 | 3.25 | 3.4 | 26 | ...... | 3.34 | 3.48 |
| 7 | 2.58 | ...... | 3.42 | 17 | ...... | ...... | 3.48 | 27 | ...... | 3.35 | ...... |
| 8 | 2.72 | ...... | 3.53 | 18 | ...... | 3.28 | 3.48 | 28 | 3.33 | 3.36 | ...... |
| 9 | 2.68 | ...... | 3.44 | 19 | 3.16 | 3.50 | 3.50 | 29 | 3.30 | ...... | 3.46 |
| 10 | 2.75 | 3.24 | 3.42 | 20 | 3.20 | 3.34 | 3.50 | 30 | 3.16 | 3.25 | ...... |
| | | | | | | | | 31 | 3.18 | ...... | 3.50 |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | ...... | ...... | 4.04 | 4.3 | 4.2 | 4.45 | 5.4 | 5.05 | 4.15 | 3.35 | 2.75 | 2.55 |
| 2 | ...... | ...... | 4.18 | 4.25 | 4.3 | 4.45 | 5.7 | 5.05 | 4.1 | 3.35 | 2.75 | 2.55 |
| 3 | ...... | ...... | 4.18 | 4.25 | 4.3 | 4.5 | 5.4 | 5.1 | 4.1 | 3.5 | 2.8 | 2.6 |
| 4 | ...... | ...... | 4.20 | 4.25 | 4.25 | 4.55 | 5.4 | 5.1 | 4.15 | 3.35 | 2.8 | 2.6 |
| 5 | ...... | ...... | 4.22 | 4.25 | 4.2 | 4.6 | 5.4 | 5.05 | 4.1 | 3.3 | 2.75 | 2.6 |
| 6 | ...... | ...... | 4.23 | 4.25 | 4.2 | 4.65 | 5.35 | 5.05 | 4.1 | 3.3 | 2.7 | 2.55 |
| 7 | ...... | ...... | 4.32 | 4.25 | 4.2 | 4.7 | 5.35 | 5.0 | 4.0 | 3.25 | 2.75 | 2.55 |
| 8 | ...... | 3.19 | 4.32 | 4.25 | 4.2 | 4.75 | 5.4 | 4.95 | 4.0 | 3.2 | 2.75 | 2.6 |
| 9 | ...... | 3.04 | 4.32 | 4.25 | 4.25 | 4.75 | 5.4 | 4.95 | 4.0 | 3.2 | 2.75 | 2.6 |
| 10 | ...... | 3.01 | 4.32 | 4.25 | 4.2 | 4.85 | 5.4 | 4.9 | 4.0 | 3.2 | 2.75 | 2.55 |
| 11 | ...... | 3.04 | 4.32 | 4.25 | 4.2 | 4.9 | 5.4 | 4.75 | 4.0 | 3.2 | 2.7 | 2.6 |
| 12 | ...... | 3.04 | 4.34 | 4.4 | 4.2 | 4.9 | 5.35 | 4.75 | 4.0 | 3.2 | 2.65 | 2.6 |
| 13 | ...... | 3.04 | 4.34 | 4.4 | 4.25 | 4.95 | 5.35 | 4.55 | 4.0 | 3.2 | 2.65 | 2.6 |
| 14 | ...... | 3.06 | 4.30 | 4.3 | 4.2 | 5.0 | 5.3 | 4.45 | 3.95 | 3.15 | 2.65 | 2.55 |
| 15 | ...... | 3.06 | 4.31 | 4.25 | 4.2 | 5.0 | 5.3 | 4.45 | 3.85 | 3.15 | 2.6 | 2.55 |
| 16 | ...... | 3.09 | 4.27 | 4.2 | 4.2 | 5.05 | 5.3 | 4.55 | 3.75 | 3.05 | 2.6 | 2.6 |
| 17 | ...... | 3.09 | 4.24 | 4.2 | 4.25 | 5.05 | 5.35 | 4.5 | 3.8 | 3.0 | 2.65 | 2.55 |
| 18 | ...... | 3.09 | 4.23 | 4.15 | 4.2 | 5.2 | 5.4 | 4.55 | 3.8 | 3.0 | 2.65 | 2.55 |
| 19 | ...... | 3.15 | 4.25 | 4.2 | 4.2 | 5.15 | 5.35 | 4.5 | 3.8 | 3.0 | 2.6 | 2.7 |
| 20 | ...... | 3.38 | 4.24 | 4.2 | 4.25 | 5.15 | 5.3 | 4.5 | 3.6 | 3.0 | 2.6 | 2.65 |
| 21 | ...... | 3.42 | 4.23 | 4.15 | 4.3 | 5.2 | 5.25 | 4.45 | 3.55 | 3.05 | 2.6 | 2.6 |
| 22 | ...... | 3.54 | 4.23 | 4.2 | 4.25 | 5.2 | 5.25 | 4.45 | 3.55 | 2.95 | 2.6 | 2.6 |
| 23 | ...... | 3.61 | 4.23 | 4.2 | 4.25 | 5.3 | 5.25 | 4.45 | 3.5 | 2.95 | 2.55 | 2.6 |
| 24 | ...... | 3.66 | 4.24 | 4.25 | 4.3 | 5.3 | 5.2 | 4.45 | 3.5 | 2.95 | 2.55 | 2.6 |
| 25 | ...... | 3.71 | 4.22 | 4.3 | 4.35 | 5.35 | 5.3 | 4.35 | 3.5 | 2.95 | 2.55 | 2.6 |
| 26 | ...... | ...... | 4.21 | 4.25 | 4.3 | 5.4 | 5.15 | 4.35 | 3.5 | 2.9 | 2.6 | 2.6 |
| 27 | ...... | 3.78 | 4.20 | 4.2 | 4.3 | 5.4 | 5.25 | 4.25 | 3.45 | 2.9 | 2.55 | 2.6 |
| 28 | ...... | 3.84 | 4.20 | 4.2 | 4.45 | 5.35 | 5.15 | 4.2 | 3.5 | 2.9 | 2.6 | 2.65 |
| 29 | ...... | 3.89 | 4.20 | 4.2 | ...... | 5.4 | 5.05 | 4.15 | 3.45 | 2.9 | 2.6 | 2.6 |
| 30 | ...... | 3.94 | 4.24 | 4.25 | ...... | 5.4 | 5.1 | 4.1 | 3.45 | 2.9 | 2.6 | 2.6 |
| 31 | ...... | 3.99 | 4.26 | 4.2 | ...... | 5.4 | ...... | 4.2 | ...... | 2.85 | 2.6 | ...... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 2.6 | 3.05 | 3.65 | 4.16 | 4.20 | 4.00 | 4.17 | 5.05 | 4.85 | 4.10 | ...... | 2.70 |
| 2 | 2.7 | 3.15 | 3.65 | 4.15 | 4.25 | 3.99 | 4.10 | 5.07 | 4.82 | 4.10 | ...... | 2.70 |
| 3 | 2.7 | 2.95 | 3.7 | 4.15 | 4.11 | 4.05 | 4.25 | 5.00 | 4.79 | 4.09 | ...... | 2.65 |
| 4 | 2.65 | 2.95 | 3.65 | 4.13 | 4.05 | 4.00 | 4.30 | 5.02 | 4.79 | 4.03 | ...... | 2.65 |
| 5 | 2.75 | 2.95 | 3.7 | 4.11 | 4.05 | 4.05 | 4.00 | 5.05 | 4.83 | 4.00 | ...... | 2.65 |
| 6 | 2.75 | 2.9 | 3.75 | 4.10 | 4.00 | 4.17 | 4.35 | 5.10 | 4.69 | 4.01 | ...... | 2.63 |
| 7 | 2.75 | 3.0 | 3.75 | 4.15 | 4.02 | 4.15 | 4.35 | 5.10 | 4.70 | 4.00 | ...... | 2.65 |
| 8 | 2.75 | 3.15 | 3.8 | 4.10 | 4.00 | 3.99 | 4.57 | 5.07 | 4.69 | 3.97 | ...... | 2.65 |
| 9 | 2.85 | 3.1 | 3.95 | 4.25 | 4.00 | 4.00 | 4.65 | 5.02 | 4.68 | 3.94 | ...... | 2.65 |
| 10 | 2.85 | 3.25 | 3.95 | 4.26 | 4.15 | 3.96 | 4.60 | 5.07 | 4.60 | 3.89 | ...... | 2.65 |
| 11 | 2.9 | 3.0 | 3.95 | 4.23 | 4.18 | 3.95 | 4.70 | 5.05 | 4.60 | 3.85 | ...... | 2.65 |
| 12 | 3.0 | 3.0 | 3.95 | 4.25 | 4.17 | 3.95 | 4.73 | 5.05 | 4.61 | ...... | ...... | 2.60 |
| 13 | 2.9 | 3.05 | 3.95 | 4.23 | 4.10 | 3.95 | 4.70 | 5.02 | 4.60 | ...... | ...... | 2.62 |
| 14 | 2.85 | 3.05 | 4.0 | 4.20 | 4.10 | 3.95 | 4.65 | 5.05 | 4.56 | ...... | ...... | 2.62 |
| 15 | 2.85 | 3.1 | 4.0 | 4.25 | 4.05 | 4.05 | 4.70 | 5.05 | 4.56 | ...... | ...... | 2.62 |
| 16 | 2.85 | 3.05 | 4.0 | 4.20 | 4.10 | 4.00 | 4.70 | 5.15 | 4.51 | ...... | ...... | 2.60 |
| 17 | 2.9 | 3.1 | 4.2 | 4.30 | 4.06 | 4.05 | 4.87 | 5.05 | 4.47 | ...... | ...... | 2.60 |
| 18 | 2.9 | 3.15 | 4.1 | 4.35 | 4.10 | 4.01 | 4.85 | 5.20 | 4.43 | ...... | ...... | 2.57 |
| 19 | 3.0 | 3.1 | 4.1 | 4.25 | 4.05 | 4.05 | 4.90 | 5.02 | 4.47 | ...... | ...... | 2.59 |
| 20 | 2.95 | 3.1 | 4.1 | 4.25 | 4.16 | 4.05 | 4.91 | 4.95 | 4.48 | ...... | 2.72 | 2.62 |

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912—Continued.*

**Gage at bridge.**

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 21 | 2.95 | 3.25 | 4.15 | 4.27 | 4.05 | 4.05 | 4.90 | 4.96 | 4.37 | ...... | 2.73 | [illegible] |
| 22 | 3.0 | 3.15 | 4.15 | 4.27 | 4.02 | 4.08 | 4.50 | 4.94 | 4.38 | ...... | 2.70 | [illegible] |
| 23 | 2.95 | 3.4 | 4.15 | 4.32 | 3.95 | 4.10 | 4.85 | 5.00 | 4.34 | ...... | 2.70 | [illegible] |
| 24 | 2.95 | 3.45 | 4.1 | 4.30 | 4.01 | 4.05 | 4.80 | 4.93 | 4.33 | ...... | 2.70 | [illegible] |
| 25 | 3.0 | 3.4 | 4.15 | 4.35 | 3.90 | 4.05 | 4.86 | 4.92 | 4.33 | ...... | 2.70 | [illegible] |
| 26 | 3.0 | 3.45 | 4.05 | 4.38 | 3.96 | 4.09 | 5.02 | 4.87 | 4.27 | ...... | 2.73 | [illegible] |
| 27 | 3.0 | 3.55 | 4.0 | 4.40 | 3.90 | 4.05 | 5.05 | 4.87 | 4.23 | ...... | 2.70 | [illegible] |
| 28 | 3.0 | 3.5 | 4.15 | 4.27 | 3.95 | 4.05 | 5.01 | 4.92 | 4.24 | ...... | 2.70 | [illegible] |
| 29 | 3.0 | 3.55 | 4.1 | 4.35 | ...... | 4.07 | 5.00 | 4.90 | 4.20 | ...... | 2.70 | [illegible] |
| 30 | 3.0 | 3.55 | 4.15 | 4.30 | ...... | 4.10 | 5.05 | 4.87 | 4.15 | ...... | 2.70 | [illegible] |
| 31 | ...... | ...... | 4.15 | 4.20 | ...... | 4.15 | ...... | 4.87 | ...... | ...... | 2.70 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 2.68 | 2.85 | 3.08 | 3.3 | 3.5 | 4.0 | 4.2 | 4.0 | [illegible] |
| 2 | 2.70 | 2.86 | 3.08 | 3.3 | 3.5 | 4.0 | 4.2 | 4.0 | [illegible] |
| 3 | 2.74 | 2.85 | 3.08 | 3.3 | 3.5 | 4.0 | 4.2 | 4.0 | [illegible] |
| 4 | 2.75 | 2.86 | 3.08 | 3.3 | 3.5 | 4.1 | 4.2 | 4.0 | [illegible] |
| 5 | 2.74 | 2.89 | 3.08 | 3.3 | 3.5 | 4.1 | 4.2 | 4.0 | [illegible] |
| 6 | 2.74 | 2.88 | 3.09 | 3.3 | 3.5 | 4.0 | 4.2 | 4.0 | [illegible] |
| 7 | 2.74 | 2.90 | 3.08 | 3.3 | 3.6 | 4.2 | 4.2 | 4.1 | [illegible] |
| 8 | 2.74 | 2.91 | 3.07 | 3.4 | 3.6 | 4.1 | 4.0 | 4.0 | [illegible] |
| 9 | 2.74 | 2.90 | 3.09 | 3.4 | 3.6 | 4.0 | 4.0 | 4.0 | [illegible] |
| 10 | 2.74 | 2.89 | 3.10 | 3.4 | 3.6 | 4.1 | 4.1 | 4.0 | [illegible] |
| 11 | 2.74 | 2.90 | 3.08 | 3.4 | 3.6 | 4.1 | 4.1 | 4.0 | [illegible] |
| 12 | 2.74 | 2.91 | 3.07 | 3.4 | 3.7 | 4.1 | 4.0 | 4.0 | [illegible] |
| 13 | 2.73 | 2.92 | 3.08 | 3.4 | 3.7 | 4.1 | 4.0 | 4.0 | [illegible] |
| 14 | 2.94 | 2.93 | 3.08 | 3.4 | 3.7 | 4.2 | 4.0 | 4.0 | [illegible] |
| 15 | 2.74 | ...... | 3.09 | 3.4 | 3.7 | 4.2 | 4.0 | 3.8 | [illegible] |
| 16 | 2.73 | ...... | 3.09 | 3.4 | 3.8 | 4.2 | 4.1 | 3.8 | [illegible] |
| 17 | 2.74 | ...... | 3.11 | 3.4 | 3.8 | 4.2 | 4.0 | 4.0 | [illegible] |
| 18 | 2.74 | ...... | 3.12 | 3.4 | 3.8 | 4.2 | 4.1 | 4.0 | [illegible] |
| 19 | 2.75 | ...... | 3.13 | 3.4 | 3.8 | 4.1 | 4.1 | ...... | [illegible] |
| 20 | 2.79 | ...... | 3.16 | 3.4 | 3.8 | 4.1 | 4.1 | ...... | [illegible] |
| 21 | 2.80 | ...... | 3.18 | 3.4 | 3.9 | 4.1 | 4.1 | ...... | [illegible] |
| 22 | 2.80 | ...... | 3.20 | 3.4 | 4.0 | 4.2 | 4.0 | ...... | [illegible] |
| 23 | 2.81 | ...... | 3.23 | 3.4 | 4.0 | 4.2 | 4.0 | ...... | ...... |
| 24 | 2.80 | ...... | 3.25 | 3.5 | 3.9 | 4.2 | 4.0 | ...... | ...... |
| 25 | 2.79 | 3.08 | 3.24 | 3.5 | 3.9 | 4.2 | 4.1 | ...... | ...... |
| 26 | 2.80 | 3.09 | 3.25 | 3.5 | 4.0 | 4.2 | 4.0 | 3.9 | ...... |
| 27 | 2.81 | 3.10 | 3.23 | 3.5 | 4.0 | 4.1 | 4.0 | 4.0 | ...... |
| 28 | 2.81 | 3.09 | ...... | 3.5 | 4.0 | 4.2 | 3.5 | 4.0 | ...... |
| 29 | 2.82 | 3.08 | ...... | 3.5 | 4.0 | 4.1 | 3.8 | 4.0 | ...... |
| 30 | 2.84 | 3.09 | ...... | 3.5 | ...... | 4.0 | 4.2 | 4.0 | ...... |
| 31 | 2.85 | ...... | ...... | 3.5 | ...... | ...... | ...... | 4.0 | ...... |

**Gage at foot of rapids.**

| Day. | Mar. | Apr. | May. | June. | Day. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | | 1908. | | | | |
| 1 | ...... | 2.82 | 2.00 | 2.48 | 16 | 2.75 | 2.65 | 2.55 | ...... |
| 2 | ...... | 2.80 | 2.70 | ...... | 17 | 2.81 | 2.53 | 2.25 | ...... |
| 3 | ...... | 3.20 | ...... | 2.60 | 18 | 2.65 | 2.65 | 2.60 | ...... |
| 4 | ...... | 2.80 | 2.65 | 2.40 | 19 | 2.70 | 2.70 | 2.50 | ...... |
| 5 | ...... | ...... | 2.60 | 2.40 | 20 | 2.80 | 2.74 | 2.54 | ...... |
| 6 | ...... | ...... | 2.30 | 2.22 | 21 | 2.70 | 2.60 | 2.58 | ...... |
| 7 | ...... | ...... | 2.55 | 2.25 | 22 | 2.70 | 2.62 | ...... | ...... |
| 8 | ...... | 2.80 | 2.63 | ...... | 23 | 2.63 | ...... | 2.56 | ...... |
| 9 | 2.65 | 2.72 | 2.68 | ...... | 24 | ...... | 2.90 | 2.60 | ...... |
| 10 | ...... | ...... | 2.60 | ...... | 25 | 2.85 | 2.75 | 2.66 | ...... |
| 11 | 2.65 | 2.74 | 2.75 | ...... | 26 | 2.85 | 2.74 | 2.54 | ...... |
| 12 | 2.68 | ...... | 2.70 | ...... | 27 | ...... | 2.84 | 2.46 | ...... |
| 13 | 2.60 | ...... | 2.54 | ...... | 28 | 2.83 | ...... | 2.60 | ...... |
| 14 | 2.66 | 2.66 | 2.40 | ...... | 29 | ...... | 2.65 | 2.75 | ...... |
| 15 | ...... | 2.60 | ...... | ...... | 30 | 2.92 | ...... | 2.68 | ...... |
| | | | | | 31 | 2.90 | ...... | 2.46 | ...... |

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912*—Contd.

**Friez automatic gage**

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | | 1908. | | | | |
| 1 | ....... | 1.63 | 1.21 | 0.80 | 16 | 1.90 | 1.38 | 1.00 | 1.00 |
| 2 | ....... | 1.64 | 1.22 | .77 | 17 | 1.86 | 1.40 | 1.01 | .90 |
| 3 | ....... | 1.58 | 1.16 | .76 | 18 | 1.90 | 1.37 | 1.00 | .90 |
| 4 | ....... | 1.62 | 1.16 | .74 | 19 | 1.82 | 1.35 | 1.02 | .95 |
| 5 | ....... | 1.58 | 1.15 | .80 | 20 | 1.52 | 1.30 | 1.02 | .97 |
| 6 | 1.84 | 1.54 | 1.13 | .80 | 21 | 1.72 | 1.36 | 1.02 | .96 |
| 7 | 1.84 | 1.46 | 1.10 | .91 | 22 | 1.68 | 1.30 | 1.03 | .98 |
| 8 | 1.84 | 1.46 | 1.08 | .86 | 23 | ....... | 1.30 | 1.02 | 1.16 |
| 9 | 1.82 | 1.46 | 1.10 | .86 | 24 | ....... | 1.30 | 1.10 | 1.10 |
| 10 | 1.80 | 1.46 | 1.08 | .86 | 25 | ....... | 1.34 | .90 | 1.00 |
| 11 | 1.80 | 1.42 | 1.06 | .83 | 26 | ....... | 1.30 | .87 | .94 |
| 12 | 1.78 | 1.40 | 1.13 | .87 | 27 | 1.78 | 1.26 | .87 | .93 |
| 13 | 1.77 | 1.36 | 1.16 | .90 | 28 | 1.68 | 1.22 | .85 | .94 |
| 14 | 1.80 | 1.42 | 1.08 | .89 | 29 | 1.65 | 1.25 | .98 | .94 |
| 15 | 1.86 | 1.50 | 1.02 | .94 | 30 | 1.66 | 1.17 | .80 | .96 |
| | | | | | 31 | ....... | 1.14 | .80 | ....... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | | | | |
| 1 | 1.20 | ....... | 1.90 | 1.68 | 2.10 | 2.75 | ....... | 2.46 | 2.25 | 1.60 | 1.25 | 0.95 |
| 2 | 1.30 | 1.55 | 1.95 | 1.69 | 2.00 | 2.80 | ....... | 2.45 | 2.25 | 1.55 | 1.12 | .95 |
| 3 | 1.05 | 1.62 | 1.95 | 1.70 | 2.70 | ....... | ....... | 2.44 | 2.24 | 1.65 | 1.14 | .92 |
| 4 | 1.00 | 1.60 | 1.90 | 1.71 | 2.60 | ....... | ....... | 2.60 | 2.32 | 1.70 | 1.15 | .95 |
| 5 | .96 | 1.62 | 1.79 | 1.82 | 2.70 | ....... | ....... | 2.43 | 2.30 | 1.58 | 1.23 | .95 |
| 6 | .98 | 1.64 | 1.68 | 1.85 | 2.50 | 2.90 | ....... | 2.48 | 2.25 | 1.60 | 1.23 | .93 |
| 7 | .96 | 1.64 | 1.70 | 1.85 | 2.75 | 2.90 | ....... | 2.43 | ....... | 1.48 | 1.10 | .92 |
| 8 | .94 | ....... | 1.75 | 1.85 | 2.75 | 2.98 | ....... | 2.40 | ....... | 1.51 | 1.10 | .92 |
| 9 | 1.00 | ....... | 1.65 | 2.05 | 2.73 | 3.00 | ....... | 2.42 | ....... | 1.52 | .93 | 1.03 |
| 10 | 1.16 | ....... | 1.60 | 1.98 | 2.73 | 3.00 | ....... | 2.40 | ....... | 1.49 | .92 | 1.12 |
| 11 | 1.35 | ....... | 1.65 | 1.97 | 2.72 | 2.95 | 2.70 | 2.45 | ....... | 1.54 | .96 | .98 |
| 12 | 1.30 | ....... | 1.75 | 1.96 | 2.70 | 2.95 | 2.65 | 2.37 | ....... | 1.52 | 1.04 | .98 |
| 13 | 1.20 | ....... | ....... | 1.96 | ....... | 2.88 | 2.68 | 2.38 | ....... | 1.55 | .98 | .95 |
| 14 | .80 | ....... | 1.70 | ....... | 2.65 | 2.75 | 2.68 | 2.38 | ....... | 1.58 | 1.00 | .96 |
| 15 | .58 | ....... | 1.70 | 2.05 | 2.65 | 2.80 | 2.65 | 2.38 | ....... | 1.46 | 1.02 | .90 |
| 16 | .62 | ....... | 1.55 | 2.12 | 2.75 | 2.75 | 2.60 | ....... | ....... | 1.48 | .98 | 1.00 |
| 17 | .70 | ....... | 1.70 | 2.12 | 2.70 | 2.85 | 2.60 | ....... | ....... | 1.48 | 1.00 | 1.00 |
| 18 | ....... | ....... | 1.70 | 2.13 | 2.68 | 2.70 | 2.75 | 2.40 | ....... | 1.48 | 1.02 | .95 |
| 19 | 1.95 | ....... | 1.70 | 2.08 | 2.75 | 2.70 | 2.80 | 2.44 | 2.00 | 1.38 | 1.00 | 1.00 |
| 20 | 1.92 | ....... | 1.70 | 1.92 | 2.75 | 2.10 | 2.80 | 2.42 | 1.90 | 1.24 | 1.13 | 1.05 |
| 21 | 1.52 | 1.60 | 1.72 | 2.15 | 3.10 | 2.65 | 2.64 | 2.38 | 1.85 | 1.28 | 1.00 | .92 |
| 22 | 1.58 | 1.65 | 1.73 | ....... | 2.88 | 2.70 | 2.57 | 2.30 | 1.79 | 1.30 | 1.08 | .88 |
| 23 | 1.59 | 1.65 | 1.74 | 2.50 | 2.70 | 2.65 | 2.58 | 2.28 | 1.81 | 1.34 | .97 | .70 |
| 24 | 1.60 | 1.65 | 1.73 | 2.25 | 2.70 | 2.65 | ....... | 2.25 | 1.86 | 1.35 | .97 | .71 |
| 25 | 1.62 | 1.60 | 1.72 | 2.40 | 2.93 | 2.70 | ....... | 2.32 | 1.76 | 1.38 | .94 | .91 |
| 26 | 1.62 | 1.52 | ....... | 2.65 | 2.92 | 2.68 | ....... | 2.33 | 1.71 | 1.40 | 1.03 | 1.05 |
| 27 | 1.60 | 1.54 | ....... | 2.68 | 2.88 | 2.69 | 2.60 | 2.30 | 1.80 | 1.25 | 1.08 | .92 |
| 28 | 1.54 | 1.58 | ....... | 2.67 | 2.85 | ....... | 2.60 | 2.18 | 1.58 | 1.14 | .85 | .75 |
| 29 | 1.35 | 1.65 | ....... | 2.48 | ....... | ....... | 2.50 | 2.15 | .80 | 1.12 | .95 | .90 |
| 30 | 1.56 | 1.62 | 1.70 | 2.40 | ....... | ....... | 2.48 | 2.19 | 1.57 | 1.08 | .90 | .88 |
| 31 | 1.56 | ....... | 1.69 | 2.10 | ....... | ....... | ....... | 2.21 | ....... | 1.20 | .90 | ....... |
| 1909–10. | | | | | | | | | | | | |
| 1 | 1.05 | 1.24 | ....... | 2.42 | 2.27 | 2.36 | 3.30 | 2.80 | 2.75 | 1.90 | 1.15 | 0.90 |
| 2 | 1.00 | 1.34 | ....... | 2.40 | 2.24 | 2.48 | 3.55 | 2.78 | 2.48 | 1.90 | 1.10 | .91 |
| 3 | .98 | 1.36 | ....... | 2.37 | 2.24 | 2.55 | 3.35 | 2.80 | 2.51 | 2.20 | 1.00 | 1.00 |
| 4 | .90 | 1.36 | ....... | 2.34 | 2.24 | 2.65 | 3.32 | 2.71 | 2.55 | 2.15 | 1.10 | .92 |
| 5 | .93 | 1.37 | ....... | 2.31 | 2.04 | 2.75 | 3.35 | 2.72 | 2.46 | 2.15 | .98 | .89 |
| 6 | 1.20 | ....... | 2.60 | 2.28 | 2.04 | 2.84 | 3.25 | 2.68 | 2.50 | 2.20 | 1.08 | .98 |
| 7 | .90 | 1.10 | 2.59 | 2.28 | 2.04 | 2.89 | 3.22 | 2.48 | 2.45 | 2.35 | 1.02 | 1.00 |
| 8 | .90 | 1.30 | 2.59 | 2.37 | 2.03 | 2.97 | 3.22 | 2.40 | 2.41 | 2.32 | 1.02 | .88 |
| 9 | 1.20 | 1.40 | 2.59 | 2.36 | 2.03 | 3.01 | 2.78 | 2.15 | 2.41 | 2.35 | .95 | .88 |
| 10 | 1.22 | 1.65 | 2.60 | 2.35 | 2.02 | 3.05 | 3.05 | 2.17 | 2.60 | 2.35 | .95 | .95 |
| 11 | 1.30 | ....... | ....... | 2.31 | 2.02 | 3.08 | 3.22 | 2.25 | 2.70 | 2.52 | .93 | 1.08 |
| 12 | 1.30 | ....... | ....... | 2.20 | 2.07 | 3.14 | 3.22 | 2.28 | 2.56 | 2.50 | 1.02 | .99 |
| 13 | 1.44 | ....... | ....... | 2.18 | 2.08 | 3.15 | 3.15 | 2.26 | 2.00 | 2.42 | 1.08 | .80 |
| 14 | 1.42 | ....... | ....... | 2.18 | 2.10 | 3.15 | 3.10 | 2.29 | 2.20 | 2.05 | 1.03 | .89 |
| 15 | 1.40 | ....... | ....... | 2.18 | 2.09 | 3.17 | 3.08 | 2.25 | 2.05 | 2.20 | 1.06 | .87 |

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912—Continued.*

**From automatic gage.**

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 16 | 0.95 | | | 2.15 | 2.08 | 3.19 | 3.10 | 2.20 | 1.76 | 2.40 | [illegible] | [illegible] |
| 17 | [illegible] | | | 2.12 | 2.05 | 3.18 | 3.08 | 2.40 | 1.65 | 2.70 | [illegible] | [illegible] |
| 18 | [illegible] | | 2.60 | 2.12 | 2.08 | 2.95 | 2.90 | 2.70 | 1.50 | 2.45 | [illegible] | [illegible] |
| 19 | [illegible] | | 2.58 | 2.11 | 2.10 | 3.18 | 3.10 | 2.65 | 1.44 | 2.20 | [illegible] | [illegible] |
| 20 | [illegible] | | 2.56 | 2.08 | 2.10 | 3.24 | 3.08 | 2.53 | 1.65 | [illegible] | [illegible] | [illegible] |
| 21 | 1.10 | | 2.54 | 2.09 | 2.07 | 3.28 | 3.04 | 2.53 | 1.90 | 1.25 | [illegible] | [illegible] |
| 22 | 1.20 | | 2.53 | 2.14 | 2.08 | 3.42 | 2.98 | 2.53 | 1.85 | [illegible] | [illegible] | [illegible] |
| 23 | 1.20 | | 2.51 | 2.14 | 2.06 | 3.40 | 2.92 | 2.35 | 1.95 | [illegible] | [illegible] | [illegible] |
| 24 | | | 2.50 | 2.13 | 2.15 | 3.45 | 2.80 | 2.58 | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | | | | 2.17 | 2.15 | 3.25 | 2.85 | 2.45 | 2.00 | [illegible] | [illegible] | [illegible] |
| 26 | | | | 2.18 | 2.13 | 3.20 | 2.90 | 2.38 | 2.20 | [illegible] | [illegible] | [illegible] |
| 27 | | | 2.50 | 2.19 | 2.20 | 3.50 | 2.95 | 2.47 | 2.24 | [illegible] | [illegible] | [illegible] |
| 28 | | | 2.40 | 2.21 | 2.30 | 3.45 | 2.86 | 2.22 | 2.50 | [illegible] | [illegible] | [illegible] |
| 29 | 1.20 | | 2.38 | 2.25 | | 3.40 | 2.89 | 2.45 | 2.40 | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | | 2.38 | 2.28 | | 3.41 | 2.88 | 2.45 | 2.10 | [illegible] | [illegible] | [illegible] |
| 31 | 1.15 | | 2.40 | 2.33 | | 3.40 | | 2.65 | | 1.10 | [illegible] | |
| 1910-11. | | | | | | | | | | | | |
| 1 | 1.02 | | 1.71 | 2.28 | 1.95 | 1.66 | 3.15 | 3.48 | | 2.20 | [illegible] | |
| 2 | [illegible] | | 1.70 | 2.25 | 1.94 | 1.62 | 3.18 | 3.63 | | 2.20 | 1.73 | |
| 3 | [illegible] | | 2.05 | 2.22 | [illegible] | 1.61 | 3.09 | 3.40 | | 2.21 | [illegible] | [illegible] |
| 4 | [illegible] | | 2.09 | 2.20 | 1.47 | 1.72 | | 2.72 | | 2.21 | [illegible] | [illegible] |
| 5 | [illegible] | 1.00 | 2.11 | 2.19 | 1.48 | 1.72 | | 2.90 | | | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | 2.09 | 2.18 | 1.49 | 1.73 | | | | | | [illegible] |
| 7 | [illegible] | [illegible] | 2.11 | 2.16 | 1.49 | 1.77 | | | | | | [illegible] |
| 8 | [illegible] | [illegible] | 2.15 | 2.15 | 1.49 | 1.55 | | 3.05 | | [illegible] | | [illegible] |
| 9 | [illegible] | [illegible] | 2.24 | 2.14 | 1.55 | 1.50 | | 3.08 | | [illegible] | | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | 2.14 | 1.61 | 1.50 | | 3.06 | | [illegible] | | |
| 11 | 1.05 | 1.49 | 2.28 | 2.18 | 1.70 | 1.51 | | 3.13 | | 1.90 | [illegible] | [illegible] |
| 12 | 1.21 | 1.46 | 2.30 | 2.18 | 1.71 | 1.50 | | 3.10 | | | | [illegible] |
| 13 | 1.28 | 1.45 | 2.32 | 2.16 | 1.71 | 1.85 | | 3.15 | | | | [illegible] |
| 14 | [illegible] | 1.39 | 2.34 | 2.14 | 1.71 | 1.90 | | 3.15 | | | [illegible] | [illegible] |
| 15 | 1.28 | 1.34 | 2.40 | 2.15 | 1.70 | 2.15 | | 3.05 | | | [illegible] | [illegible] |
| 16 | 1.28 | 1.33 | 2.58 | | 1.70 | 2.40 | | 2.98 | | | [illegible] | [illegible] |
| 17 | 1.25 | 1.38 | 2.61 | | 1.70 | 2.45 | | 2.96 | | | [illegible] | |
| 18 | [illegible] | [illegible] | 2.48 | | 1.70 | | | | | | [illegible] | |
| 19 | [illegible] | [illegible] | 2.45 | | 1.70 | | | 2.90 | 2.50 | | [illegible] | |
| 20 | [illegible] | [illegible] | 2.45 | | 1.70 | | | 2.93 | 2.35 | | [illegible] | |
| 21 | [illegible] | 1.45 | 2.40 | 2.10 | 1.70 | | | 3.05 | 2.25 | | [illegible] | |
| 22 | [illegible] | [illegible] | 2.39 | 2.10 | 1.68 | | | 3.12 | 2.32 | [illegible] | [illegible] | |
| 23 | [illegible] | 1.73 | 2.34 | 2.09 | 1.67 | | | 3.05 | 2.31 | [illegible] | [illegible] | |
| 24 | [illegible] | 1.72 | [illegible] | 2.05 | 1.67 | | | 3.05 | 2.24 | [illegible] | [illegible] | |
| 25 | 1.21 | 1.68 | 2.35 | 2.07 | 1.68 | 3.00 | | | 2.21 | 1.30 | [illegible] | |
| 26 | 1.28 | 1.45 | 2.32 | 2.06 | 1.71 | 3.06 | | | 2.38 | 1.25 | [illegible] | [illegible] |
| 27 | [illegible] | 1.60 | 2.31 | 2.05 | 1.70 | 3.10 | | | 2.42 | 1.29 | [illegible] | [illegible] |
| 28 | 1.10 | 1.71 | 2.29 | 2.07 | 1.69 | 3.18 | | | 2.48 | 1.37 | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | 2.28 | 1.96 | | 3.25 | 3.65 | | 2.37 | 1.39 | [illegible] | [illegible] |
| 30 | [illegible] | 1.80 | 2.30 | 1.96 | | 3.30 | 3.50 | | 2.25 | 1.45 | [illegible] | |
| 31 | 1.09 | | 2.32 | 1.94 | | 3.35 | | | | 1.57 | 1.10 | |

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912*—Contd.

**Fries automatic gage.**

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | | 1.16 | | | | 2.20 | 2.25 | 1.88 | 1.99 |
| 2 | | 1.16 | 1.58 | | | 2.12 | 2.05 | 1.98 | 2.05 |
| 3 | 1.21 | 1.16 | 1.65 | | 1.71 | 2.10 | 2.18 | 1.93 | 2.00 |
| 4 | 1.30 | 1.12 | | | 1.70 | 1.95 | 2.28 | 1.91 | 1.96 |
| 5 | 1.22 | 1.10 | | | 1.70 | 1.90 | 2.17 | 1.97 | 1.96 |
| 6 | 1.22 | 1.08 | | | 1.68 | 1.95 | 2.17 | 1.88 | 1.90 |
| 7 | 1.10 | 1.10 | | | 1.65 | 2.05 | 2.09 | 1.86 | 1.88 |
| 8 | | 1.13 | | | 1.65 | 2.07 | 2.12 | 1.90 | 1.85 |
| 9 | 1.25 | | 1.38 | | 1.65 | 2.49 | 2.12 | 1.92 | 1.97 |
| 10 | 1.24 | | 1.37 | 1.30 | 1.68 | 2.35 | 2.22 | 1.92 | 1.90 |
| 11 | 1.22 | 1.28 | 1.40 | 1.31 | 1.73 | 2.21 | 2.20 | 1.85 | 1.85 |
| 12 | 1.20 | 1.20 | 1.39 | 1.38 | 1.70 | 2.45 | 2.18 | 1.83 | 1.80 |
| 13 | | 1.18 | 1.38 | 1.47 | 1.66 | 2.36 | 2.17 | 1.78 | 1.90 |
| 14 | | 1.31 | 1.38 | 1.48 | 1.72 | 2.15 | 2.20 | 1.70 | 2.00 |
| 15 | 1.12 | 1.62 | 1.38 | 1.48 | 1.65 | 2.28 | 2.23 | 1.80 | 1.96 |
| 16 | 1.05 | 1.50 | 1.38 | 1.50 | 1.73 | 2.25 | 2.29 | 1.83 | 1.89 |
| 17 | 1.13 | | 1.37 | 1.50 | 1.98 | 2.32 | 2.30 | 1.84 | 1.85 |
| 18 | 1.18 | 1.50 | 1.35 | 1.50 | 1.95 | 2.45 | 2.58 | 1.80 | 1.67 |
| 19 | 1.12 | 1.51 | 1.36 | 1.50 | 1.86 | 2.83 | 2.20 | 1.82 | 1.90 |
| 20 | 1.10 | 1.65 | 1.34 | 1.48 | 2.00 | 2.38 | 2.12 | 1.82 | 1.89 |
| 21 | 1.00 | 1.52 | 1.33 | 1.47 | 1.93 | 2.31 | 1.89 | 1.80 | 1.95 |
| 22 | 1.03 | 1.49 | 1.33 | 1.47 | 2.30 | 2.28 | 1.70 | 1.90 | 1.80 |
| 23 | 1.02 | 1.49 | | 1.41 | 2.20 | 2.31 | 1.90 | 1.85 | 1.87 |
| 24 | 1.10 | 1.50 | | 1.48 | 2.10 | 2.29 | 1.90 | 1.85 | 1.89 |
| 25 | 1.30 | 1.54 | | 1.50 | 2.10 | 2.29 | 1.89 | 1.85 | 1.79 |
| 26 | 1.20 | 1.56 | | 1.50 | 2.08 | 2.25 | 1.81 | 1.88 | 1.88 |
| 27 | 1.05 | | | | 2.10 | 2.20 | 1.77 | 1.98 | 1.97 |
| 28 | 1.10 | | | | 2.15 | 2.41 | 1.45 | 2.05 | 1.97 |
| 29 | 1.06 | | | | 2.18 | 2.42 | 1.64 | 1.99 | |
| 30 | 1.12 | | | | | 2.25 | 1.60 | 1.98 | |
| 31 | 1.18 | | | | | 2.30 | | 2.00 | |

*Rating tables for Link River at Klamath Falls, Oreg.*

**Gage at bridge, May 15, 1904, to December 31, 1906.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 2.40 | 935 | 3.50 | 1,800 | 4.60 | 3,400 | 5.70 | 5,570 |
| 2.50 | 985 | 3.60 | 1,920 | 4.70 | 3,580 | 5.80 | 5,790 |
| 2.60 | 1,035 | 3.70 | 2,045 | 4.80 | 3,770 | 5.90 | 6,020 |
| 2.70 | 1,090 | 3.80 | 2,175 | 4.90 | 3,960 | 6.00 | 6,250 |
| 2.80 | 1,150 | 3.90 | 2,310 | 5.00 | 4,150 | 6.20 | 6,710 |
| 2.90 | 1,220 | 4.00 | 2,450 | 5.10 | 4,340 | 6.40 | 7,180 |
| 3.00 | 1,300 | 4.10 | 2,590 | 5.20 | 4,530 | 6.60 | 7,660 |
| 3.10 | 1,390 | 4.20 | 2,740 | 5.30 | 4,730 | 6.80 | 8,140 |
| 3.20 | 1,485 | 4.30 | 2,900 | 5.40 | 4,930 | | |
| 3.30 | 1,585 | 4.40 | 3,060 | 5.50 | 5,140 | | |
| 3.40 | 1,690 | 4.50 | 3,230 | 5.60 | 5,350 | | |

NOTE.—This table is not applicable for ice or obstructed channel conditions. It is based on discharge measurements made during 1904 to 1908 and is not well defined.

**Fries automatic gage, June 6 to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.60 | 625 | 1.00 | 994 | 1.40 | 1,474 | 1.80 | 2,036 |
| .70 | 703 | 1.10 | 1,106 | 1.50 | 1,612 | 1.90 | 2,184 |
| .80 | 792 | 1.20 | 1,224 | 1.60 | 1,750 | 2.00 | 2,332 |
| .90 | 888 | 1.30 | 1,344 | 1.70 | 1,892 | | |

NOTE.—Table applicable only for open channel. It is based on eighteen discharge measurements made during 1908 and is well defined.

[illegible]

*Daily discharge, in second-feet, of Link River at Klamath Falls, Oreg., for 1908–1910*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 1,050 | 1,270 | 2,510 | 2,900 | 2,740 | 3,140 | 4,930 | 4,240 | 2,660 | 1,640 | 1,120 | 1,010 |
| 2 | 994 | 1,400 | 2,710 | 2,820 | 2,900 | 3,140 | 5,570 | 4,240 | 2,590 | 1,640 | 1,120 | 1,010 |
| 3 | 973 | 1,420 | 2,710 | 2,820 | 2,900 | 3,230 | 4,930 | 4,340 | 2,590 | 1,800 | 1,150 | 1,040 |
| 4 | 888 | 1,420 | 2,740 | 2,820 | 2,820 | 3,320 | 4,930 | 4,340 | 2,660 | 1,640 | 1,150 | 1,040 |
| 5 | 920 | 1,440 | 2,770 | 2,820 | 2,740 | 3,400 | 4,930 | 4,240 | 2,590 | 1,580 | 1,120 | 1,040 |
| 6 | 1,220 | 1,280 | 2,790 | 2,820 | 2,740 | 3,490 | 4,830 | 4,240 | 2,590 | 1,580 | 1,090 | 1,010 |
| 7 | 888 | 1,110 | 2,930 | 2,820 | 2,740 | 3,580 | 4,830 | 4,150 | 2,450 | 1,540 | 1,120 | 1,010 |
| 8 | 888 | 1,480 | 2,930 | 2,820 | 2,740 | 3,680 | 4,930 | 4,060 | 2,450 | 1,480 | 1,120 | 1,040 |
| 9 | 1,220 | 1,340 | 2,930 | 2,820 | 2,820 | 3,680 | 4,930 | 4,060 | 2,450 | 1,480 | 1,120 | 1,040 |
| 10 | 1,250 | 1,310 | 2,930 | 2,820 | 2,740 | 3,860 | 4,930 | 3,960 | 2,450 | 1,490 | 1,120 | 1,010 |
| 11 | 1,340 | 1,340 | 2,930 | 2,820 | 2,740 | 3,960 | 4,930 | 3,680 | 2,450 | 1,480 | 1,090 | 1,040 |
| 12 | 1,340 | 1,340 | 2,960 | 3,060 | 2,740 | 3,960 | 4,830 | 3,680 | 2,450 | 1,480 | 1,060 | 1,040 |
| 13 | 1,530 | 1,340 | 2,960 | 3,060 | 2,820 | 4,060 | 4,830 | 3,320 | 2,450 | 1,480 | 1,060 | 1,040 |
| 14 | 1,500 | 1,350 | 2,900 | 2,900 | 2,740 | 4,150 | 4,730 | 3,140 | 2,380 | 1,440 | 1,060 | 1,010 |
| 15 | 1,470 | 1,350 | 2,920 | 2,820 | 2,740 | 4,150 | 4,730 | 3,140 | 2,240 | 1,440 | 1,040 | 1,010 |
| 16 | 941 | 1,380 | 2,850 | 2,740 | 2,740 | 4,240 | 4,730 | 3,320 | 2,110 | 1,340 | 1,040 | 1,040 |
| 17 | 888 | 1,380 | 2,800 | 2,740 | 2,820 | 4,240 | 4,830 | 3,230 | 2,180 | 1,300 | 1,060 | 1,010 |
| 18 | 703 | 1,380 | 2,790 | 2,660 | 2,740 | 4,530 | 4,930 | 3,320 | 2,180 | 1,300 | 1,060 | 1,010 |
| 19 | 792 | 1,440 | 2,820 | 2,740 | 2,740 | 4,440 | 4,830 | 3,230 | 2,180 | 1,300 | 1,040 | 1,090 |
| 20 | 748 | 1,670 | 2,800 | 2,740 | 2,820 | 4,440 | 4,730 | 3,230 | 1,920 | 1,300 | 1,040 | 1,060 |
| 21 | 1,110 | 1,710 | 2,790 | 2,660 | 2,900 | 4,530 | 4,630 | 3,140 | 1,860 | 1,340 | 1,040 | 1,040 |
| 22 | 1,220 | 1,850 | 2,790 | 2,740 | 2,820 | 4,530 | 4,630 | 3,140 | 1,860 | 1,260 | 1,040 | 1,040 |
| 23 | 1,220 | 1,930 | 2,790 | 2,740 | 2,820 | 4,730 | 4,630 | 3,140 | 1,800 | 1,260 | 1,010 | 1,040 |
| 24 | 1,220 | 2,000 | 2,800 | 2,820 | 2,900 | 4,730 | 4,530 | 3,140 | 1,800 | 1,260 | 1,010 | 1,040 |
| 25 | 1,220 | 2,060 | 2,770 | 2,900 | 2,980 | 4,830 | 4,730 | 2,980 | 1,800 | 1,260 | 1,010 | 1,040 |
| 26 | 1,220 | 2,150 | 2,760 | 2,820 | 2,900 | 4,930 | 4,440 | 2,980 | 1,800 | 1,220 | 1,040 | 1,040 |
| 27 | 1,220 | 2,230 | 2,740 | 2,740 | 2,900 | 4,930 | 4,630 | 2,820 | 1,740 | 1,220 | 1,010 | 1,040 |
| 28 | 1,220 | 2,300 | 2,740 | 2,740 | 3,140 | 4,830 | 4,440 | 2,740 | 1,800 | 1,220 | 1,040 | 1,060 |
| 29 | 1,220 | 2,370 | 2,740 | 2,740 | ....... | 4,930 | 4,240 | 2,660 | 1,740 | 1,220 | 1,040 | 1,040 |
| 30 | 1,050 | 2,440 | 2,800 | 2,820 | ....... | 4,930 | 4,340 | 2,590 | 1,740 | 1,220 | 1,040 | 1,040 |
| 31 | 1,160 | ....... | 2,840 | 2,740 | ....... | 4,930 | ....... | 2,740 | ....... | 1,190 | 1,040 | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | 1910. | | | | 1910. | | | |
| 1 | 1,040 | 1,340 | 1,980 | 11 | 1,220 | 1,300 | 2,380 | 21 | 1,260 | 1,540 | 2,660 |
| 2 | 1,090 | 1,440 | 1,980 | 12 | 1,300 | 1,300 | 2,380 | 22 | 1,300 | 1,440 | 2,660 |
| 3 | 1,090 | 1,260 | 2,040 | 13 | 1,220 | 1,340 | 2,380 | 23 | 1,260 | 1,690 | 2,060 |
| 4 | 1,060 | 1,260 | 1,980 | 14 | 1,180 | 1,340 | 2,450 | 24 | 1,260 | 1,740 | 2,590 |
| 5 | 1,120 | 1,260 | 2,040 | 15 | 1,180 | 1,390 | 2,450 | 25 | 1,300 | 1,690 | 2,660 |
| 6 | 1,120 | 1,220 | 2,110 | 16 | 1,180 | 1,340 | 2,450 | 26 | 1,300 | 1,740 | 2,520 |
| 7 | 1,120 | 1,300 | 2,110 | 17 | 1,220 | 1,390 | 2,740 | 27 | 1,300 | 1,860 | 2,450 |
| 8 | 1,120 | 1,440 | 2,180 | 18 | 1,220 | 1,440 | 2,590 | 28 | 1,300 | 1,800 | 2,660 |
| 9 | 1,180 | 1,390 | 2,380 | 19 | 1,300 | 1,390 | 2,590 | 29 | 1,300 | 1,860 | 2,590 |
| 10 | 1,180 | 1,540 | 2,380 | 20 | 1,260 | 1,390 | 2,590 | 30 | 1,300 | 1,860 | 2,660 |
| | | | | | | | | 31 | 1,320 | ...... | 2,660 |

NOTE.—Discharge Jan. 1 to Nov. 7, 1909, based on automatic gage and fairly well defined rating curve. Discharge Nov. 8, 1909, to Dec. 31, 1910, based on gage at bridge and poorly defined rating curve. Condition became so bad in 1911 that no discharge was computed.

[illegible]

*Monthly discharge of Link River at Klamath Falls, Oreg., for 1904–1910*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1908–9.** | | | | | | | |
| October | 2,390 | 612 | 1,350 | 0.434 | 0.50 | 83,000 | A. |
| November | 1,820 | 1,640 | 1,770 | .569 | .63 | 105,000 | A. |
| December | 2,260 | 1,680 | 1,940 | .624 | .72 | 119,000 | A. |
| January | 3,540 | 1,560 | 2,540 | .817 | .94 | 156,000 | A. |
| February | 4,340 | 2,360 | 3,580 | 1.15 | 1.20 | 199,000 | B. |
| March | 4,140 | 2,530 | 3,710 | 1.19 | 1.37 | 228,000 | B. |
| April | 3,760 | 3,180 | 3,500 | 1.12 | 1.25 | 208,000 | B. |
| May | 3,400 | 2,620 | 2,990 | .961 | 1.11 | 184,000 | A. |
| June | 2,900 | 792 | 2,350 | .756 | .84 | 140,000 | B. |
| July | 1,890 | 1,080 | 1,520 | .489 | .56 | 93,500 | A. |
| August | 1,280 | 840 | 1,030 | .331 | .38 | 63,300 | A. |
| September | 1,130 | 703 | 927 | .298 | .33 | 55,200 | A. |
| The year | 4,340 | 612 | 2,270 | .730 | 9.83 | 1,630,000 | |
| **1909–10.** | | | | | | | |
| October | 1,530 | 703 | 1,120 | .360 | .42 | 68,900 | A. |
| November | 2,440 | 1,110 | 1,620 | .521 | .58 | 96,400 | C. |
| December | 2,960 | 2,510 | 2,810 | .904 | 1.04 | 173,000 | C. |
| January | 3,060 | 2,660 | 2,810 | .904 | 1.04 | 173,000 | C. |
| February | 3,140 | 2,740 | 2,820 | .907 | .94 | 157,000 | C. |
| March | 4,930 | 3,140 | 4,180 | 1.34 | 1.54 | 257,000 | C. |
| April | 5,570 | 4,240 | 4,770 | 1.53 | 1.71 | 284,000 | C. |
| May | 4,340 | 2,580 | 3,460 | 1.11 | 1.28 | 213,000 | C. |
| June | 2,660 | 1,740 | 2,200 | .707 | .79 | 131,000 | C. |
| July | 1,800 | 1,180 | 1,400 | .450 | .52 | 86,100 | C. |
| August | 1,150 | 1,010 | 1,070 | .344 | .40 | 65,800 | C. |
| September | 1,090 | 1,010 | 1,030 | .331 | .37 | 61,300 | C. |
| The year | 5,570 | 703 | 2,440 | .785 | 10.63 | 1,770,000 | |
| **1910.** | | | | | | | |
| October | 1,320 | 1,040 | 1,210 | .389 | .45 | 74,400 | C. |
| November | 1,860 | 1,220 | 1,480 | .476 | .53 | 88,100 | C. |
| December | 2,740 | 1,980 | 2,420 | .778 | .90 | 149,000 | C. |

*Discharge measurements of Moore Bros. flume near Klamath Falls, Oreg., in 1910–11.*

| Date. | Discharge. | Date. | Discharge. |
|---|---|---|---|
| 1910. | *Sec.-ft.* | 1911. | *Sec.-ft.* |
| June 9 | 133 | Sept. 25 | 214 |
| 13 | 130 | 26 | 210 |
| 1911. | | Nov. 22 | 213 |
| | | 24 | 200 |
| July 28 | 135 | 27 | 200 |

## LOWER KLAMATH LAKE NEAR BROWNELL, CAL.

Lower Klamath Lake is connected with Klamath River by the Klamath Straits. The Southern Pacific Co. has constructed a railroad through the marshes parallel to Klamath River. The embankment which crosses Klamath Straits is provided with gates whereby the surface flow can be regulated.

A gage was established in Lower Klamath Lake near Brownell, Cal., January 23, 1907. The elevation of the zero of the gage is 4,082.50 feet above sea level, and all gage heights have been referred to this datum. The normal area of the lake is 21,000 acres.

[illegible]

[illegible]

[illegible]

*rily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912*—Contd.

**Gage at bridge.**

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | 1908. | | | | 1908. | | | |
| ........ | 2.58 | 3.19 | 3.37 | 11 | ...... | ...... | 3.40 | 21 | ...... | 3.30 | ...... |
| ........ | ...... | 3.26 | 3.38 | 12 | ...... | 3.23 | 3.34 | 22 | 3.11 | 3.30 | 3.48 |
| ........ | 2.51 | 3.20 | 3.40 | 13 | 2.75 | 3.25 | 3.47 | 23 | 3.11 | 3.32 | ...... |
| ........ | 2.50 | 3.17 | 3.44 | 14 | ...... | 3.25 | 3.41 | 24 | 3.14 | 3.35 | 3.48 |
| ........ | 2.55 | 3.20 | 3.43 | 15 | ...... | 3.27 | 3.40 | 25 | 3.23 | 3.35 | 3.50 |
| ........ | 2.58 | 3.18 | 3.43 | 16 | 3.01 | 3.25 | 3.4 | 26 | ...... | 3.34 | 3.48 |
| ........ | 2.58 | ...... | 3.42 | 17 | ...... | ...... | 3.48 | 27 | ...... | 3.35 | ...... |
| ........ | 2.72 | ...... | 3.53 | 18 | ...... | 3.28 | 3.48 | 28 | 3.33 | 3.36 | ...... |
| ........ | 2.68 | ...... | 3.44 | 19 | 3.16 | 3.50 | 3.50 | 29 | 3.30 | ...... | 3.46 |
| ........ | 2.75 | 3.24 | 3.42 | 20 | 3.20 | 3.34 | 3.50 | 30 | 3.16 | 3.25 | ...... |
| | | | | | | | | 31 | 3.18 | ...... | 3.50 |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | ...... | ...... | 4.04 | 4.3 | 4.2 | 4.45 | 5.4 | 5.05 | 4.15 | 3.35 | 2.75 | 2.55 |
| 2 | ...... | ...... | 4.18 | 4.25 | 4.3 | 4.45 | 5.7 | 5.05 | 4.1 | 3.35 | 2.75 | 2.55 |
| 3 | ...... | ...... | 4.18 | 4.25 | 4.3 | 4.5 | 5.4 | 5.1 | 4.1 | 3.5 | 2.8 | 2.6 |
| 4 | ...... | ...... | 4.20 | 4.25 | 4.25 | 4.55 | 5.4 | 5.1 | 4.15 | 3.35 | 2.8 | 2.6 |
| 5 | ...... | ...... | 4.22 | 4.25 | 4.2 | 4.6 | 5.4 | 5.05 | 4.1 | 3.3 | 2.75 | 2.6 |
| 6 | ...... | ...... | 4.23 | 4.25 | 4.2 | 4.65 | 5.35 | 5.05 | 4.1 | 3.3 | 2.7 | 2.55 |
| 7 | ...... | ...... | 4.32 | 4.25 | 4.2 | 4.7 | 5.35 | 5.0 | 4.0 | 3.25 | 2.75 | 2.55 |
| 8 | ...... | 3.19 | 4.32 | 4.25 | 4.2 | 4.75 | 5.4 | 4.95 | 4.0 | 3.2 | 2.75 | 2.6 |
| 9 | ...... | 3.04 | 4.32 | 4.25 | 4.25 | 4.75 | 5.4 | 4.95 | 4.0 | 3.2 | 2.75 | 2.6 |
| 10 | ...... | 3.01 | 4.32 | 4.25 | 4.2 | 4.85 | 5.4 | 4.9 | 4.0 | 3.2 | 2.75 | 2.55 |
| 11 | ...... | 3.04 | 4.32 | 4.25 | 4.2 | 4.9 | 5.4 | 4.75 | 4.0 | 3.2 | 2.7 | 2.6 |
| 12 | ...... | 3.04 | 4.34 | 4.4 | 4.2 | 4.9 | 5.35 | 4.75 | 4.0 | 3.2 | 2.65 | 2.6 |
| 13 | ...... | 3.04 | 4.34 | 4.4 | 4.25 | 4.95 | 5.35 | 4.55 | 4.0 | 3.2 | 2.65 | 2.6 |
| 14 | ...... | 3.06 | 4.30 | 4.3 | 4.2 | 5.0 | 5.3 | 4.45 | 3.95 | 3.15 | 2.65 | 2.55 |
| 15 | ...... | 3.06 | 4.31 | 4.25 | 4.2 | 5.0 | 5.3 | 4.45 | 3.85 | 3.15 | 2.6 | 2.55 |
| 16 | ...... | 3.09 | 4.27 | 4.2 | 4.2 | 5.05 | 5.3 | 4.55 | 3.75 | 3.05 | 2.6 | 2.6 |
| 17 | ...... | 3.09 | 4.24 | 4.2 | 4.25 | 5.05 | 5.35 | 4.5 | 3.8 | 3.0 | 2.65 | 2.55 |
| 18 | ...... | 3.09 | 4.23 | 4.15 | 4.2 | 5.2 | 5.4 | 4.55 | 3.8 | 3.0 | 2.65 | 2.55 |
| 19 | ...... | 3.15 | 4.25 | 4.2 | 4.2 | 5.15 | 5.35 | 4.5 | 3.8 | 3.0 | 2.6 | 2.7 |
| 20 | ...... | 3.38 | 4.24 | 4.2 | 4.25 | 5.15 | 5.3 | 4.5 | 3.6 | 3.0 | 2.6 | 2.65 |
| 21 | ...... | 3.42 | 4.23 | 4.15 | 4.3 | 5.2 | 5.25 | 4.45 | 3.55 | 3.05 | 2.6 | 2.6 |
| 22 | ...... | 3.54 | 4.23 | 4.2 | 4.25 | 5.2 | 5.25 | 4.45 | 3.55 | 2.95 | 2.6 | 2.6 |
| 23 | ...... | 3.61 | 4.23 | 4.2 | 4.25 | 5.3 | 5.25 | 4.45 | 3.5 | 2.95 | 2.55 | 2.6 |
| 24 | ...... | 3.66 | 4.24 | 4.25 | 4.3 | 5.3 | 5.2 | 4.45 | 3.5 | 2.95 | 2.55 | 2.6 |
| 25 | ...... | 3.71 | 4.22 | 4.3 | 4.35 | 5.35 | 5.3 | 4.35 | 3.5 | 2.95 | 2.55 | 2.6 |
| 26 | ...... | ...... | 4.21 | 4.25 | 4.3 | 5.4 | 5.15 | 4.35 | 3.5 | 2.9 | 2.6 | 2.6 |
| 27 | ...... | 3.78 | 4.20 | 4.2 | 4.3 | 5.4 | 5.25 | 4.25 | 3.45 | 2.9 | 2.55 | 2.6 |
| 28 | ...... | 3.84 | 4.20 | 4.2 | 4.45 | 5.35 | 5.15 | 4.2 | 3.5 | 2.9 | 2.6 | 2.65 |
| 29 | ...... | 3.89 | 4.20 | 4.2 | ...... | 5.4 | 5.05 | 4.15 | 3.45 | 2.9 | 2.6 | 2.6 |
| 30 | ...... | 3.94 | 4.24 | 4.25 | ...... | 5.4 | 5.1 | 4.1 | 3.45 | 2.9 | 2.6 | 2.6 |
| 31 | ...... | 3.99 | 4.26 | 4.2 | ...... | 5.4 | ...... | 4.2 | ...... | 2.85 | 2.6 | ...... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 2.6 | 3.05 | 3.65 | 4.16 | 4.20 | 4.00 | 4.17 | 5.05 | 4.85 | 4.10 | ...... | 2.70 |
| 2 | 2.7 | 3.15 | 3.65 | 4.15 | 4.25 | 3.99 | 4.10 | 5.07 | 4.82 | 4.10 | ...... | 2.70 |
| 3 | 2.7 | 2.95 | 3.7 | 4.15 | 4.11 | 4.05 | 4.25 | 5.00 | 4.79 | 4.09 | ...... | 2.65 |
| 4 | 2.65 | 2.95 | 3.65 | 4.13 | 4.05 | 4.00 | 4.30 | 5.02 | 4.79 | 4.03 | ...... | 2.65 |
| 5 | 2.75 | 2.95 | 3.7 | 4.11 | 4.05 | 4.05 | 4.00 | 5.05 | 4.83 | 4.00 | ...... | 2.65 |
| 6 | 2.75 | 2.9 | 3.75 | 4.10 | 4.00 | 4.17 | 4.35 | 5.10 | 4.69 | 4.01 | ...... | 2.63 |
| 7 | 2.75 | 3.0 | 3.75 | 4.15 | 4.02 | 4.15 | 4.35 | 5.10 | 4.70 | 4.00 | ...... | 2.65 |
| 8 | 2.75 | 3.15 | 3.8 | 4.10 | 4.00 | 3.99 | 4.57 | 5.07 | 4.69 | 3.97 | ...... | 2.65 |
| 9 | 2.85 | 3.1 | 3.95 | 4.25 | 4.00 | 4.00 | 4.65 | 5.02 | 4.68 | 3.94 | ...... | 2.65 |
| 10 | 2.85 | 3.25 | 3.95 | 4.26 | 4.15 | 3.96 | 4.60 | 5.07 | 4.60 | 3.89 | ...... | 2.65 |
| 11 | 2.9 | 3.0 | 3.95 | 4.23 | 4.18 | 3.95 | 4.70 | 5.05 | 4.60 | 3.85 | ...... | 2.65 |
| 12 | 3.0 | 3.0 | 3.95 | 4.25 | 4.17 | 3.95 | 4.73 | 5.05 | 4.61 | ...... | ...... | 2.60 |
| 13 | 2.9 | 3.05 | 3.95 | 4.23 | 4.10 | 3.95 | 4.70 | 5.02 | 4.60 | ...... | ...... | 2.62 |
| 14 | 2.85 | 3.05 | 4.0 | 4.20 | 4.10 | 3.95 | 4.65 | 5.05 | 4.56 | ...... | ...... | 2.62 |
| 15 | 2.85 | 3.1 | 4.0 | 4.25 | 4.05 | 4.05 | 4.70 | 5.05 | 4.56 | ...... | ...... | 2.62 |
| 16 | 2.85 | 3.05 | 4.0 | 4.20 | 4.10 | 4.00 | 4.70 | 5.15 | 4.51 | ...... | ...... | 2.60 |
| 17 | 2.9 | 3.1 | 4.2 | 4.30 | 4.06 | 4.05 | 4.87 | 5.05 | 4.47 | ...... | ...... | 2.60 |
| 18 | 2.9 | 3.15 | 4.1 | 4.35 | 4.10 | 4.01 | 4.85 | 5.20 | 4.43 | ...... | ...... | 2.57 |
| 19 | 3.0 | 3.1 | 4.1 | 4.25 | 4.05 | 4.05 | 4.90 | 5.02 | 4.47 | ...... | ...... | 2.59 |
| 20 | 2.95 | 3.1 | 4.1 | 4.25 | 4.16 | 4.05 | 4.91 | 4.95 | 4.48 | ...... | 2.72 | 2.62 |

[illegible]

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912*—Contd.

**Fries automatic gage**

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | | 1908. | | | | |
| 1 | ....... | 1.63 | 1.21 | 0.80 | 16 | 1.90 | 1.38 | 1.00 | 1.00 |
| 2 | ....... | 1.64 | 1.22 | .77 | 17 | 1.86 | 1.40 | 1.01 | .90 |
| 3 | ....... | 1.58 | 1.16 | .76 | 18 | 1.90 | 1.37 | 1.00 | .90 |
| 4 | ....... | 1.62 | 1.16 | .74 | 19 | 1.82 | 1.35 | 1.02 | .95 |
| 5 | ....... | 1.58 | 1.15 | .80 | 20 | 1.52 | 1.30 | 1.02 | .97 |
| 6 | 1.84 | 1.54 | 1.13 | .80 | 21 | 1.72 | 1.36 | 1.02 | .96 |
| 7 | 1.84 | 1.46 | 1.10 | .91 | 22 | 1.68 | 1.30 | 1.03 | .98 |
| 8 | 1.84 | 1.46 | 1.08 | .86 | 23 | ....... | 1.30 | 1.02 | 1.16 |
| 9 | 1.82 | 1.46 | 1.10 | .86 | 24 | ....... | 1.30 | 1.10 | 1.10 |
| 10 | 1.80 | 1.46 | 1.08 | .86 | 25 | ....... | 1.34 | .90 | 1.00 |
| 11 | 1.80 | 1.42 | 1.06 | .83 | 26 | ....... | 1.30 | .87 | .94 |
| 12 | 1.78 | 1.40 | 1.13 | .87 | 27 | 1.78 | 1.26 | .87 | .93 |
| 13 | 1.77 | 1.36 | 1.16 | .90 | 28 | 1.68 | 1.22 | .85 | .94 |
| 14 | 1.80 | 1.42 | 1.08 | .89 | 29 | 1.65 | 1.25 | .98 | .94 |
| 15 | 1.86 | 1.50 | 1.02 | .94 | 30 | 1.66 | 1.17 | .80 | .96 |
| | | | | | 31 | ....... | 1.14 | .80 | ....... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | | | | |
| 1 | 1.20 | ....... | 1.90 | 1.68 | 2.10 | 2.75 | ....... | 2.46 | 2.25 | 1.60 | 1.25 | 0.95 |
| 2 | 1.30 | 1.55 | 1.95 | 1.69 | 2.00 | 2.80 | ....... | 2.45 | 2.25 | 1.55 | 1.12 | .95 |
| 3 | 1.05 | 1.62 | 1.95 | 1.70 | 2.70 | ....... | ....... | 2.44 | 2.24 | 1.65 | 1.14 | .92 |
| 4 | 1.00 | 1.60 | 1.90 | 1.71 | 2.60 | ....... | ....... | 2.60 | 2.32 | 1.70 | 1.15 | .95 |
| 5 | .96 | 1.62 | 1.79 | 1.82 | 2.70 | ....... | ....... | 2.43 | 2.30 | 1.58 | 1.23 | .95 |
| 6 | .98 | 1.64 | 1.68 | 1.85 | 2.50 | 2.90 | ....... | 2.48 | 2.25 | 1.60 | 1.23 | .93 |
| 7 | .96 | 1.64 | 1.70 | 1.85 | 2.75 | 2.90 | ....... | 2.43 | ....... | 1.48 | 1.10 | .92 |
| 8 | .94 | ....... | 1.75 | 1.85 | 2.75 | 2.98 | ....... | 2.40 | ....... | 1.51 | 1.10 | .92 |
| 9 | 1.00 | ....... | 1.65 | 2.05 | 2.73 | 3.00 | ....... | 2.42 | ....... | 1.52 | .93 | 1.03 |
| 10 | 1.16 | ....... | 1.60 | 1.98 | 2.73 | 3.00 | ....... | 2.40 | ....... | 1.49 | .92 | 1.12 |
| 11 | 1.35 | ....... | 1.65 | 1.97 | 2.72 | 2.95 | 2.70 | 2.45 | ....... | 1.54 | .96 | .98 |
| 12 | 1.30 | ....... | 1.75 | 1.98 | 2.70 | 2.95 | 2.65 | 2.37 | ....... | 1.52 | 1.04 | .98 |
| 13 | 1.20 | ....... | ....... | 1.96 | ....... | 2.88 | 2.68 | 2.38 | ....... | 1.55 | .98 | .95 |
| 14 | .80 | ....... | 1.70 | ....... | 2.65 | 2.75 | 2.68 | 2.38 | ....... | 1.58 | 1.00 | .95 |
| 15 | .58 | ....... | 1.70 | 2.05 | 2.65 | 2.80 | 2.65 | 2.38 | ....... | 1.46 | 1.02 | .90 |
| 16 | .62 | ....... | 1.55 | 2.12 | 2.75 | 2.75 | 2.60 | ....... | ....... | 1.48 | .98 | 1.00 |
| 17 | .70 | ....... | 1.70 | 2.12 | 2.70 | 2.85 | 2.60 | ....... | ....... | 1.48 | 1.00 | 1.00 |
| 18 | ....... | ....... | 1.70 | 2.13 | 2.68 | 2.70 | 2.75 | 2.40 | ....... | 1.48 | 1.02 | .95 |
| 19 | 1.95 | ....... | 1.70 | 2.08 | 2.75 | 2.70 | 2.80 | 2.44 | 2.00 | 1.38 | 1.00 | 1.00 |
| 20 | 1.92 | ....... | 1.70 | 1.92 | 2.75 | 2.10 | 2.80 | 2.42 | 1.90 | 1.24 | 1.13 | 1.05 |
| 21 | 1.52 | 1.60 | 1.72 | 2.15 | 3.10 | 2.65 | 2.64 | 2.38 | 1.85 | 1.28 | 1.00 | .92 |
| 22 | 1.58 | 1.65 | 1.73 | ....... | 2.88 | 2.70 | 2.57 | 2.30 | 1.79 | 1.30 | 1.08 | .88 |
| 23 | 1.59 | 1.65 | 1.74 | 2.50 | 2.70 | 2.65 | 2.58 | 2.28 | 1.81 | 1.34 | .97 | .70 |
| 24 | 1.60 | 1.65 | 1.73 | 2.25 | 2.70 | 2.65 | ....... | 2.25 | 1.86 | 1.35 | .97 | .71 |
| 25 | 1.62 | 1.60 | 1.72 | 2.40 | 2.93 | 2.70 | ....... | 2.32 | 1.76 | 1.38 | .94 | .91 |
| 26 | 1.62 | 1.52 | ....... | 2.65 | 2.92 | 2.68 | ....... | 2.33 | 1.71 | 1.40 | 1.03 | 1.05 |
| 27 | 1.60 | 1.54 | ....... | 2.68 | 2.88 | 2.69 | 2.60 | 2.30 | 1.80 | 1.25 | 1.08 | .92 |
| 28 | 1.54 | 1.58 | ....... | 2.67 | 2.85 | ....... | 2.60 | 2.18 | 1.58 | 1.14 | .85 | .75 |
| 29 | 1.35 | 1.65 | ....... | 2.48 | ....... | ....... | 2.50 | 2.15 | .80 | 1.12 | .95 | .90 |
| 30 | 1.56 | 1.62 | 1.70 | 2.40 | ....... | ....... | 2.48 | 2.19 | 1.57 | 1.08 | .90 | .88 |
| 31 | 1.56 | ....... | 1.69 | 2.10 | ....... | ....... | ....... | 2.21 | ....... | 1.20 | .90 | ....... |
| 1909–10. | | | | | | | | | | | | |
| 1 | 1.05 | 1.24 | ....... | 2.42 | 2.27 | 2.36 | 3.30 | 2.80 | 2.75 | 1.90 | 1.15 | 0.90 |
| 2 | 1.00 | 1.34 | ....... | 2.40 | 2.24 | 2.48 | 3.55 | 2.78 | 2.48 | 1.90 | 1.10 | .91 |
| 3 | .98 | 1.36 | ....... | 2.37 | 2.24 | 2.55 | 3.35 | 2.80 | 2.51 | 2.20 | 1.00 | 1.00 |
| 4 | .90 | 1.36 | ....... | 2.34 | 2.24 | 2.65 | 3.32 | 2.71 | 2.55 | 2.15 | 1.10 | .92 |
| 5 | .93 | 1.37 | ....... | 2.31 | 2.04 | 2.75 | 3.35 | 2.72 | 2.46 | 2.15 | .98 | .89 |
| 6 | 1.20 | ....... | 2.60 | 2.28 | 2.04 | 2.84 | 3.25 | 2.68 | 2.50 | 2.20 | 1.08 | .98 |
| 7 | .90 | 1.10 | 2.59 | 2.28 | 2.04 | 2.89 | 3.22 | 2.48 | 2.45 | 2.35 | 1.02 | 1.00 |
| 8 | .90 | 1.30 | 2.59 | 2.37 | 2.03 | 2.97 | 3.22 | 2.40 | 2.41 | 2.32 | 1.02 | .88 |
| 9 | 1.20 | 1.40 | 2.59 | 2.36 | 2.03 | 3.01 | 2.78 | 2.15 | 2.41 | 2.35 | .95 | .88 |
| 10 | 1.22 | 1.65 | 2.60 | 2.35 | 2.02 | 3.05 | 3.05 | 2.17 | 2.60 | 2.35 | .95 | .95 |
| 11 | 1.30 | ....... | ....... | 2.31 | 2.02 | 3.08 | 3.22 | 2.25 | 2.70 | 2.52 | .93 | 1.08 |
| 12 | 1.30 | ....... | ....... | 2.20 | 2.07 | 3.14 | 3.22 | 2.28 | 2.56 | 2.50 | 1.02 | .99 |
| 13 | 1.44 | ....... | ....... | 2.18 | 2.08 | 3.15 | 3.15 | 2.26 | 2.60 | 2.42 | 1.08 | .80 |
| 14 | 1.42 | ....... | ....... | 2.18 | 2.10 | 3.15 | 3.10 | 2.29 | 2.20 | 2.05 | 1.03 | .89 |
| 15 | 1.40 | ....... | ....... | 2.18 | 2.09 | 3.17 | 3.08 | 2.25 | 2.05 | 2.20 | 1.06 | .87 |

*[illegible] Klamath River at Klamath Falls, Oreg., for 190[illegible]–1912—Contd.*

[illegible]

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19[illegible] | | | | | | | | | | | | |
| [illegible] | ------- | ------- | ------- | [illegible] | 2.0 | [illegible] | [illegible] | 2.2[illegible] | [illegible] | [illegible] | .6 | [illegible] |
| [illegible] | ------- | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 1.6[illegible] | [illegible] | .6 | [illegible] |
| [illegible] | [illegible] | 2.[illegible] | | [illegible] | 2.[illegible] | 2.[illegible] | [illegible] | 2.7[illegible] | [illegible] | [illegible] | .6 | [illegible] |
| [illegible] | | 2.[illegible] | | [illegible] | 2.[illegible] | [illegible] | 3.[illegible] | 2.[illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 2.[illegible] | | 2.[illegible] | 2.[illegible] | 3.[illegible] | [illegible] | [illegible] | 1.6[illegible] | [illegible] | .7 | [illegible] |
| [illegible] | [illegible] | [illegible] | | 2.0 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .8 | [illegible] |
| 1[illegible] | [illegible] | [illegible] | | [illegible] | 2.[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .8 | [illegible] |
| 1[illegible] | [illegible] | [illegible] | | [illegible] | 2.[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ------- | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ------- | ------- | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ------- | ------- | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ------- | [illegible] | | [illegible] | 2.[illegible] | 3.[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ------- | [illegible] | | [illegible] | 2.[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ------- | [illegible] | | [illegible] | ------- | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ------- | [illegible] | | [illegible] | ------- | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | ------- | [illegible] | | [illegible] | ------- | [illegible] | ------- | [illegible] | ------- | [illegible] | [illegible] | ------- |
| [illegible] | | | | | | | | | | | | |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | 3.[illegible] | [illegible] | ------- | [illegible] | [illegible] | ------- |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | 3.[illegible] | [illegible] | ------- | [illegible] | [illegible] | ------- |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ------- | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | ------- | [illegible] | ------- | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | ------- | [illegible] | ------- | ------- | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | ------- | ------- | ------- | ------- | ------- | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | ------- | ------- | ------- | ------- | ------- | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ------- | [illegible] | ------- | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ------- | [illegible] | ------- | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ------- | [illegible] | ------- | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ------- | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ------- | ------- | ------- | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ------- | ------- | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | ------- | [illegible] | ------- | ------- | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | ------- | [illegible] | ------- | ------- | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ------- | [illegible] | |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | ------- | [illegible] | |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | .5 | |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | .9 | |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .9 | |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | ------- | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .7 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | .3 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | | [illegible] | | [illegible] | ------- | [illegible] | ------- | ------- | ------- | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912—Contd.*

**Fries automatic gage.**

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | | 1.16 | | | | 2.20 | 2.25 | 1.88 | 1.99 |
| 2 | | 1.16 | 1.58 | | | 2.12 | 2.05 | 1.98 | 2.05 |
| 3 | 1.21 | 1.16 | 1.65 | | 1.71 | 2.10 | 2.18 | 1.93 | 2.00 |
| 4 | 1.30 | 1.12 | | | 1.70 | 1.95 | 2.28 | 1.91 | 1.96 |
| 5 | 1.22 | 1.10 | | | 1.70 | 1.90 | 2.17 | 1.97 | 1.96 |
| 6 | 1.22 | 1.08 | | | 1.68 | 1.95 | 2.17 | 1.88 | 1.90 |
| 7 | 1.10 | 1.10 | | | 1.65 | 2.05 | 2.09 | 1.86 | 1.88 |
| 8 | | 1.13 | | | 1.65 | 2.07 | 2.12 | 1.90 | 1.85 |
| 9 | 1.25 | | 1.38 | | 1.65 | 2.49 | 2.12 | 1.92 | 1.97 |
| 10 | 1.24 | | 1.37 | 1.30 | 1.68 | 2.35 | 2.22 | 1.92 | 1.90 |
| 11 | 1.22 | 1.28 | 1.40 | 1.31 | 1.73 | 2.21 | 2.20 | 1.85 | 1.85 |
| 12 | 1.20 | 1.20 | 1.39 | 1.38 | 1.70 | 2.45 | 2.18 | 1.83 | 1.80 |
| 13 | | 1.18 | 1.38 | 1.47 | 1.66 | 2.36 | 2.17 | 1.78 | 1.90 |
| 14 | | 1.31 | 1.38 | 1.48 | 1.72 | 2.15 | 2.20 | 1.70 | 2.00 |
| 15 | 1.12 | 1.62 | 1.38 | 1.48 | 1.65 | 2.28 | 2.23 | 1.80 | 1.96 |
| 16 | 1.05 | 1.50 | 1.38 | 1.50 | 1.73 | 2.25 | 2.29 | 1.83 | 1.89 |
| 17 | 1.13 | | 1.37 | 1.50 | 1.98 | 2.32 | 2.30 | 1.84 | 1.85 |
| 18 | 1.18 | 1.50 | 1.35 | 1.50 | 1.95 | 2.45 | 2.58 | 1.80 | 1.67 |
| 19 | 1.12 | 1.51 | 1.36 | 1.50 | 1.86 | 2.33 | 2.20 | 1.82 | 1.90 |
| 20 | 1.10 | 1.65 | 1.34 | 1.48 | 2.00 | 2.38 | 2.12 | 1.82 | 1.89 |
| 21 | 1.00 | 1.52 | 1.33 | 1.47 | 1.93 | 2.31 | 1.89 | 1.80 | 1.95 |
| 22 | 1.03 | 1.49 | 1.33 | 1.47 | 2.30 | 2.28 | 1.70 | 1.90 | 1.80 |
| 23 | 1.02 | 1.49 | | 1.41 | 2.20 | 2.31 | 1.90 | 1.85 | 1.87 |
| 24 | 1.10 | 1.50 | | 1.48 | 2.10 | 2.29 | 1.90 | 1.85 | 1.89 |
| 25 | 1.30 | 1.54 | | 1.50 | 2.10 | 2.29 | 1.89 | 1.85 | 1.79 |
| 26 | 1.20 | 1.56 | | 1.50 | 2.08 | 2.25 | 1.81 | 1.88 | 1.88 |
| 27 | 1.05 | | | | 2.10 | 2.20 | 1.77 | 1.98 | 1.97 |
| 28 | 1.10 | | | | 2.15 | 2.41 | 1.45 | 2.05 | 1.97 |
| 29 | 1.06 | | | | 2.18 | 2.42 | 1.64 | 1.99 | |
| 30 | 1.12 | | | | | 2.25 | 1.60 | 1.98 | |
| 31 | 1.18 | | | | | 2.30 | | 2.00 | |

*Rating tables for Link River at Klamath Falls, Oreg.*

**Gage at bridge, May 15, 1904, to December 31, 1908.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 2.40 | 935 | 3.50 | 1,800 | 4.60 | 3,400 | 5.70 | 5,570 |
| 2.50 | 985 | 3.60 | 1,920 | 4.70 | 3,580 | 5.80 | 5,790 |
| 2.60 | 1,035 | 3.70 | 2,045 | 4.80 | 3,770 | 5.90 | 6,020 |
| 2.70 | 1,090 | 3.80 | 2,175 | 4.90 | 3,960 | 6.00 | 6,250 |
| 2.80 | 1,150 | 3.90 | 2,310 | 5.00 | 4,150 | 6.20 | 6,710 |
| 2.90 | 1,220 | 4.00 | 2,450 | 5.10 | 4,340 | 6.40 | 7,180 |
| 3.00 | 1,300 | 4.10 | 2,590 | 5.20 | 4,530 | 6.60 | 7,660 |
| 3.10 | 1,390 | 4.20 | 2,740 | 5.30 | 4,730 | 6.80 | 8,140 |
| 3.20 | 1,485 | 4.30 | 2,900 | 5.40 | 4,930 | | |
| 3.30 | 1,585 | 4.40 | 3,060 | 5.50 | 5,140 | | |
| 3.40 | 1,690 | 4.50 | 3,230 | 5.60 | 5,350 | | |

NOTE.—This table is not applicable for ice or obstructed channel conditions. It is based on discharge measurements made during 1904 to 1908 and is not well defined.

**Fries automatic gage, June 6 to December 31, 1908.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.60 | 625 | 1.00 | 994 | 1.40 | 1,474 | 1.80 | 2,036 |
| .70 | 703 | 1.10 | 1,106 | 1.50 | 1,612 | 1.90 | 2,184 |
| .80 | 792 | 1.20 | 1,224 | 1.60 | 1,750 | 2.00 | 2,332 |
| .90 | 888 | 1.30 | 1,344 | 1.70 | 1,892 | | |

NOTE.—Table applicable only for open channel. It is based on eighteen discharge measurements made during 1908 and is well defined.

[illegible] discharge, in second-feet, of Link River at Klamath Falls, [illegible]

[illegible] discharge computed from the gage heights at the bridge, taking into account [illegible] and the direction and force of the wind.

*Daily discharge, in second-feet, of Link River at Klamath Falls, Oreg., for 1908–1910*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 1,050 | 1,270 | 2,510 | 2,900 | 2,740 | 3,140 | 4,930 | 4,240 | 2,660 | 1,640 | 1,120 | 1,010 |
| 2 | 904 | 1,400 | 2,710 | 2,820 | 2,900 | 3,140 | 5,570 | 4,240 | 2,590 | 1,640 | 1,120 | 1,010 |
| 3 | 973 | 1,420 | 2,710 | 2,820 | 2,900 | 3,230 | 4,930 | 4,340 | 2,590 | 1,800 | 1,150 | 1,040 |
| 4 | 888 | 1,420 | 2,740 | 2,820 | 2,820 | 3,320 | 4,930 | 4,340 | 2,660 | 1,640 | 1,150 | 1,040 |
| 5 | 920 | 1,440 | 2,770 | 2,820 | 2,740 | 3,400 | 4,930 | 4,240 | 2,590 | 1,580 | 1,120 | 1,040 |
| 6 | 1,220 | 1,280 | 2,790 | 2,820 | 2,740 | 3,490 | 4,830 | 4,240 | 2,590 | 1,580 | 1,090 | 1,010 |
| 7 | 888 | 1,110 | 2,930 | 2,820 | 2,740 | 3,580 | 4,830 | 4,150 | 2,450 | 1,540 | 1,120 | 1,010 |
| 8 | 888 | 1,480 | 2,930 | 2,820 | 2,740 | 3,680 | 4,930 | 4,060 | 2,450 | 1,480 | 1,120 | 1,040 |
| 9 | 1,220 | 1,340 | 2,930 | 2,820 | 2,820 | 3,680 | 4,930 | 4,060 | 2,450 | 1,480 | 1,120 | 1,040 |
| 10 | 1,250 | 1,310 | 2,930 | 2,820 | 2,740 | 3,860 | 4,930 | 3,960 | 2,450 | 1,490 | 1,120 | 1,010 |
| 11 | 1,340 | 1,340 | 2,930 | 2,820 | 2,740 | 3,960 | 4,930 | 3,690 | 2,450 | 1,480 | 1,090 | 1,040 |
| 12 | 1,340 | 1,340 | 2,960 | 3,060 | 2,740 | 3,960 | 4,830 | 3,690 | 2,450 | 1,480 | 1,060 | 1,040 |
| 13 | 1,530 | 1,340 | 2,960 | 3,060 | 2,820 | 4,060 | 4,830 | 3,320 | 2,450 | 1,480 | 1,060 | 1,040 |
| 14 | 1,500 | 1,350 | 2,900 | 2,900 | 2,740 | 4,150 | 4,730 | 3,140 | 2,380 | 1,440 | 1,060 | 1,010 |
| 15 | 1,470 | 1,350 | 2,920 | 2,820 | 2,740 | 4,150 | 4,730 | 3,140 | 2,240 | 1,440 | 1,040 | 1,010 |
| 16 | 941 | 1,380 | 2,850 | 2,740 | 2,740 | 4,240 | 4,730 | 3,320 | 2,110 | 1,340 | 1,040 | 1,040 |
| 17 | 888 | 1,380 | 2,800 | 2,740 | 2,820 | 4,240 | 4,830 | 3,230 | 2,180 | 1,300 | 1,060 | 1,010 |
| 18 | 703 | 1,380 | 2,790 | 2,660 | 2,740 | 4,530 | 4,930 | 3,320 | 2,180 | 1,300 | 1,060 | 1,010 |
| 19 | 792 | 1,440 | 2,820 | 2,740 | 2,740 | 4,440 | 4,830 | 3,230 | 2,180 | 1,300 | 1,040 | 1,090 |
| 20 | 748 | 1,670 | 2,800 | 2,740 | 2,820 | 4,440 | 4,730 | 3,230 | 1,920 | 1,300 | 1,040 | 1,060 |
| 21 | 1,110 | 1,710 | 2,790 | 2,660 | 2,900 | 4,530 | 4,630 | 3,140 | 1,860 | 1,340 | 1,040 | 1,040 |
| 22 | 1,220 | 1,850 | 2,790 | 2,740 | 2,820 | 4,530 | 4,630 | 3,140 | 1,860 | 1,260 | 1,040 | 1,040 |
| 23 | 1,220 | 1,930 | 2,790 | 2,740 | 2,820 | 4,730 | 4,630 | 3,140 | 1,800 | 1,260 | 1,010 | 1,040 |
| 24 | 1,220 | 2,000 | 2,800 | 2,820 | 2,900 | 4,730 | 4,530 | 3,140 | 1,800 | 1,260 | 1,010 | 1,040 |
| 25 | 1,220 | 2,060 | 2,770 | 2,900 | 2,980 | 4,830 | 4,730 | 2,980 | 1,800 | 1,260 | 1,010 | 1,040 |
| 26 | 1,220 | 2,150 | 2,760 | 2,820 | 2,900 | 4,930 | 4,440 | 2,980 | 1,800 | 1,220 | 1,040 | 1,040 |
| 27 | 1,220 | 2,230 | 2,740 | 2,740 | 2,900 | 4,930 | 4,630 | 2,820 | 1,740 | 1,220 | 1,010 | 1,040 |
| 28 | 1,220 | 2,300 | 2,740 | 2,740 | 3,140 | 4,830 | 4,440 | 2,740 | 1,800 | 1,220 | 1,040 | 1,060 |
| 29 | 1,220 | 2,370 | 2,740 | 2,740 | ....... | 4,930 | 4,240 | 2,660 | 1,740 | 1,220 | 1,040 | 1,040 |
| 30 | 1,050 | 2,440 | 2,800 | 2,820 | ....... | 4,930 | 4,340 | 2,590 | 1,740 | 1,220 | 1,040 | 1,040 |
| 31 | 1,160 | ....... | 2,840 | 2,740 | ....... | 4,930 | ....... | 2,740 | ....... | 1,190 | 1,040 | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | 1910. | | | | 1910. | | | |
| 1 | 1,040 | 1,340 | 1,980 | 11 | 1,220 | 1,300 | 2,380 | 21 | 1,260 | 1,540 | 2,660 |
| 2 | 1,090 | 1,440 | 1,980 | 12 | 1,300 | 1,300 | 2,380 | 22 | 1,300 | 1,440 | 2,660 |
| 3 | 1,090 | 1,260 | 2,040 | 13 | 1,220 | 1,340 | 2,380 | 23 | 1,260 | 1,690 | 2,660 |
| 4 | 1,060 | 1,260 | 1,980 | 14 | 1,180 | 1,340 | 2,450 | 24 | 1,260 | 1,740 | 2,590 |
| 5 | 1,120 | 1,260 | 2,040 | 15 | 1,180 | 1,390 | 2,450 | 25 | 1,300 | 1,690 | 2,660 |
| 6 | 1,120 | 1,220 | 2,110 | 16 | 1,180 | 1,340 | 2,450 | 26 | 1,300 | 1,740 | 2,520 |
| 7 | 1,120 | 1,300 | 2,110 | 17 | 1,220 | 1,390 | 2,740 | 27 | 1,300 | 1,860 | 2,450 |
| 8 | 1,120 | 1,440 | 2,180 | 18 | 1,220 | 1,440 | 2,590 | 28 | 1,300 | 1,800 | 2,660 |
| 9 | 1,180 | 1,390 | 2,380 | 19 | 1,300 | 1,390 | 2,590 | 29 | 1,300 | 1,860 | 2,590 |
| 10 | 1,180 | 1,540 | 2,380 | 20 | 1,260 | 1,390 | 2,590 | 30 | 1,300 | 1,860 | 2,660 |
| | | | | | | | | 31 | 1,320 | ...... | 2,660 |

NOTE.—Discharge Jan. 1 to Nov. 7, 1909, based on automatic gage and fairly well defined rating curve. Discharge Nov. 8, 1909, to Dec. 31, 1910, based on gage at bridge and poorly defined rating curve. Condition became so bad in 1911 that no discharge was computed.

[illegible]

## [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Water is diverted in the Keno canal around the Friez gage. Part of this is used to supply the power plant operated by Moore Bros., and the remainder is wasted at a spillway. Both power plant and spillway are located above the bridge and below the Friez gage. All water therefore passes the bridge gage and is included in the discharge measurements, but does not pass the Friez gage. There is no record of the amount of water diverted, except a few miscellaneous measurements which do not include the water wasted into the spillway.

This station was maintained after January 1, 1910, by the United States Reclamation Service, but the daily and monthly discharge tables were computed by the United States Geological Survey.

*Discharge measurements of Link River near Klamath Falls, Oreg., in 1904–1909.*

**Gage at bridge.**

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-ft.* | 1907. | | *Feet.* | *Sec.-ft.* |
| May 15 | Lewis and Landes | 7.15 | 9,073 | Jan. 10 | L. F. Hendricks | 3.80 | 2,300 |
| June 7 | .....do | 6.55 | 7,342 | Feb. 18 | .....do | 4.90 | 4,910 |
| Aug. 25 | T. H. Humphreys | 3.70 | 1,915 | Mar. 2 | .....do | 5.00 | 4,980 |
| Sept. 16 | C. T. Darley | 3.40 | 1,782 | Apr. 1 | .....do | 5.60 | 5,620 |
| 28 | .....do | 3.30 | 2,005 | 20 | .....do | 5.80 | 5,570 |
| Oct. 18 | .....do | 3.40 | 2,135 | May 9 | Stevens and Ellsworth | 5.65 | 4,000 |
| Nov. 8 | .....do | 3.50 | 1,968 | 23 | J. C. Stevens | 5.30 | 4,220 |
| 24 | .....do | 3.60 | 1,898 | June 13 | C. E. Ellsworth | 4.98 | 4,390 |
| | | | | 19 | .....do | 4.85 | 3,740 |
| 1905. | | | | July 5 | .....do | 4.35 | 2,450 |
| Jan. 4 | C. T. Darley | 4.05 | 2,862 | 23 | .....do | 3.85 | 1,960 |
| 17 | .....do | 4.10 | 2,768 | 31 | .....do | 3.65 | 1,640 |
| 17 | .....do | 4.10 | 2,872 | Aug. 12 | .....do | 3.40 | 1,610 |
| 17 | .....do | 4.10 | 2,627 | Sept. 4 | .....do | 3.15 | 1,640 |
| Feb. 1 | .....do | 4.30 | 3,338 | 19 | .....do | 3.05 | 1,490 |
| 13 | .....do | 4.50 | 2,994 | Oct. 26 | .....do | 3.25 | 1,870 |
| 17 | .....do | 4.40 | 2,802 | Nov. 13 | .....do | 3.32 | 1,830 |
| Mar. 2 | .....do | 4.40 | 2,984 | | | | |
| Apr. 12 | .....do | 4.49 | 3,645 | 1908. | | | |
| June 5 | .....do | 3.88 | 2,324 | Feb. 17 | C. E. Ellsworth | 4.19 | 3,030 |
| 20 | .....do | 3.59 | 1,800 | Mar. 14 | .....do | 4.20 | 2,800 |
| 28 | .....do | 3.40 | 1,517 | 21 | .....do | 4.15 | 2,890 |
| July 11 | .....do | 3.14 | 1,466 | Apr. 3 | .....do | 4.36 | 3,800 |
| 18 | .....do | 2.97 | 1,063 | 15 | .....do | 4.26 | 2,620 |
| 28 | .....do | 2.80 | 1,049 | 18 | .....do | 4.18 | 2,700 |
| Aug. 7 | .....do | 2.63 | 1,041 | 21 | .....do | 4.28 | 2,610 |
| 14 | .....do | 2.59 | 1,066 | 25 | Ellsworth and Kimble | 4.16 | 2,820 |
| 16 | Clapp and Darley | 2.60 | 1,104 | 30 | .....do | 4.16 | 2,670 |
| Sept. 7 | C. T. Darley | 2.58 | 1,032 | May 5 | .....do | 4.11 | 2,560 |
| 16 | .....do | 2.58 | 1,073 | 9 | H. Kimble | 4.02 | 2,620 |
| Nov. 2 | .....do | 2.90 | 1,283 | 13 | .....do | 4.07 | 2,680 |
| | | | | 18 | .....do | 4.03 | 2,170 |
| 1906. | | | | 21 | .....do | 4.04 | 2,980 |
| May 11 | L. F. Hendricks | 5.06 | 4,560 | 25 | .....do | 3.94 | 2,530 |
| June 20 | .....do | 4.65 | 3,400 | 30 | .....do | 3.87 | 2,910 |
| 22 | Clapp and Hendricks | 4.65 | 3,640 | June 4 | .....do | 3.76 | 2,290 |
| July 9 | L. F. Hendricks | 4.25 | 2,860 | 13 | .....do | ........ | 2,000 |
| 24 | .....do | 3.80 | 2,190 | | | | |
| Aug. 22 | .....do | 3.00 | 1,390 | | | | |
| Dec. 20 | .....do | 3.48 | 2,050 | | | | |

*Discharge measurements of Link River near Klamath Falls, Oreg.* [illegible]

**[illegible]**

| Date. | Hydrographer | Gage height. | Discharge. | Date. | Hydrographer. | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | | *Feet.* | *Sec.-ft.* | 190[illegible] | | [illegible] | |
| [illegible] | [illegible] | 1.85 | 2,110 | Oct. [illegible] | [illegible] | [illegible] | |
| [illegible] | [illegible] | [illegible] | 1,710 | [illegible] | [illegible] | | |
| [illegible] | [illegible] | 1.65 | 1,700 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 1.57 | 1,620 | Nov. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 1.42 | 1,570 | Dec. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 1.44 | 1,530 | | | | |
| [illegible] | [illegible] | 1.70 | 1,920 | 190[illegible] | | | |
| [illegible] | [illegible] | 1.33 | 1,330 | Feb. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 1.30 | 1,390 | Apr. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 1.19 | 1,210 | May [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 1.20 | 1,250 | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | .75 | 715 | June [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 1.02 | 1,080 | Sept. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | .92 | [illegible] | | | | |

*Discharge measurements of Link River at Klamath Falls, Oreg.,* [illegible]

| Date. | Hydrographer. | Gage height. | | Discharge. |
|---|---|---|---|---|
| | | [illegible] | [illegible] | |
| [illegible] | | *Feet.* | *Feet.* | *Sec.-ft.* |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 2.[illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 2.[illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | 3.[illegible] | a2.[illegible] | [illegible] |
| [illegible] | [illegible] | 4.12 | a2.[illegible] | [illegible] |
| [illegible] | [illegible] | 4.15 | a2.[illegible] | [illegible] |
| [illegible] | [illegible] | 4.12 | 2.14 | [illegible] |
| [illegible] | [illegible] | 4.86 | 2.55 | [illegible] |
| [illegible] | [illegible] | 4.40 | 2.22 | [illegible] |
| [illegible] | [illegible] | 4.18 | 1.93 | [illegible] |
| [illegible] | [illegible] | 2.69 | 1.69 | [illegible] |
| [illegible] | [illegible] | 3.05 | 1.50 | [illegible] |

[illegible] This gage height is the mean for the [illegible]

*[illegible] gage height, in feet, of Link River at Klamath Falls, Oreg., for 19[illegible]*

**[illegible]**

| Day. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Mar. | June | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904-1912—Contd.*

**Gage at bridge.**

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904-5.** | | | | | | | | | | | | |
| 1 | 3.3 | 3.5 | 3.55 | 4.1 | 4.2 | 4.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 3.3 | 3.45 | 3.6 | 4.1 | 4.4 | 4.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 3.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 3.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 3.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | 3.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| **1905-6.** | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible]

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912.*

**Gage at bridge.**

| Day. | May. | June. | July. | Aug. | Sept. | Day. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | | | 1904. | | | | | |
| 1 | | [illegible] | [illegible] | 4.25 | 3.5 | 16 | 7.1 | 6.25 | 5.0 | 3.90 | 3.35 |
| 2 | | [illegible] | 5.45 | 4.3 | 3.5 | 17 | 7.1 | 6.2 | 4.95 | 3.85 | 3.35 |
| 3 | | 6.7 | 5.4 | 4.25 | 3.5 | 18 | 7.15 | 6.1 | 4.9 | 3.85 | 3.3 |
| 4 | | 6.7 | 5.4 | 4.2 | 3.45 | 19 | 7.1 | 6.05 | 4.85 | 3.8 | 3.3 |
| 5 | | 6.65 | 5.35 | 4.2 | 3.45 | 20 | 7.1 | 6.0 | 4.8 | 3.8 | 3.3 |
| 6 | | 6.6 | 5.3 | 4.15 | 3.45 | 21 | 7.1 | 6.0 | 4.8 | 3.75 | 3.3 |
| 7 | | 6.55 | 5.3 | 4.15 | 3.45 | 22 | 7.05 | 5.95 | 4.75 | 3.75 | 3.45 |
| 8 | | 6.55 | 5.25 | 4.15 | 3.45 | 23 | 7.0 | 5.85 | 4.75 | 3.7 | 3.4 |
| 9 | | 6.5 | 5.25 | 4.1 | 3.4 | 24 | 7.0 | 5.8 | 4.75 | 3.7 | 3.35 |
| 10 | | 6.45 | 5.2 | 4.05 | 3.4 | 25 | 6.95 | 5.75 | 4.7 | 3.7 | 3.3 |
| 11 | | 6.4 | 5.2 | 4.05 | 3.4 | 26 | 6.9 | 5.75 | 4.65 | 3.65 | 3.3 |
| 12 | | 6.4 | 5.15 | 4.0 | 3.4 | 27 | 6.9 | 5.7 | 4.6 | 3.65 | 3.25 |
| 13 | | 6.35 | 5.1 | 4.0 | 3.35 | 28 | 6.9 | 5.65 | 4.55 | 3.6 | 3.3 |
| 14 | | 6.3 | 5.1 | 3.95 | 3.35 | 29 | 6.85 | 5.6 | 4.5 | 3.55 | 3.2 |
| 15 | 7.15 | 6.3 | 5.05 | 3.95 | 3.35 | 30 | 6.85 | 5.55 | 4.45 | 3.55 | 3.2 |
| | | | | | | 31 | 6.8 | ........ | 4.4 | 3.55 | ........ |

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912*—Contd.

**Gage at bridge.**

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 1 | 3.3 | 3.5 | 3.55 | 4.1 | 4.2 | 4.4 | 4.5 | 4.2 | 3.95 | 3.45 | 2.79 | 2.6 |
| 2 | 3.3 | 3.45 | 3.6 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.85 | 3.45 | 2.75 | 2.6 |
| 3 | 3.3 | 3.45 | 3.6 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.85 | 3.3 | 2.7 | 2.58 |
| 4 | 3.3 | 3.45 | 3.6 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.9 | a 3.3 | 2.67 | 2.6 |
| 5 | 3.3 | 3.45 | 3.65 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.88 | 3.25 | 2.67 | 2.58 |
| 6 | 3.3 | 3.5 | 3.7 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.88 | 3.3 | 2.67 | 2.6 |
| 7 | 3.3 | 3.5 | 3.7 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.81 | 3.2 | 2.5 | 2.58 |
| 8 | 3.35 | 3.5 | 3.7 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.88 | 3.2 | 2.63 | 2.58 |
| 9 | 3.4 | 3.5 | 3.7 | 4.1 | 4.4 | 4.4 | 4.5 | 4.2 | 3.85 | a 3.25 | 2.6 | 2.58 |
| 10 | 3.4 | 3.5 | 3.7 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.8 | 3.25 | 2.6 | 2.62 |
| 11 | 3.4 | 3.55 | 3.7 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.8 | a 3.25 | 2.59 | 2.63 |
| 12 | 3.35 | 3.55 | 3.7 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.78 | a 3.2 | 2.6 | 2.58 |
| 13 | 3.35 | 3.6 | 3.75 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.75 | 3.2 | 2.6 | 2.58 |
| 14 | 3.4 | 3.5 | 3.75 | 4.1 | 4.5 | 4.4 | 4.5 | 4.2 | 3.7 | 3.1 | 2.59 | 2.6 |
| 15 | 3.4 | 3.5 | 3.8 | 4.1 | 4.5 | 4.4 | 4.5 | 4.1 | 3.6 | 3.05 | 2.6 | 2.6 |
| 16 | 3.45 | 3.5 | 3.8 | 4.1 | 4.5 | 4.4 | 4.5 | 4.1 | 3.7 | a 3.0 | 2.6 | 2.55 |
| 17 | 3.4 | 3.5 | 3.8 | 4.1 | 4.4 | 4.4 | 4.5 | 4.1 | 3.62 | 2.9 | 2.60 | 2.5 |
| 18 | 3.4 | 3.5 | 3.8 | 4.1 | 4.4 | 4.4 | 4.45 | 4.05 | a 3.61 | 2.9 | 2.63 | 2.55 |
| 19 | 3.45 | 3.55 | 3.8 | 4.1 | 4.4 | 4.4 | 4.4 | 4.05 | 3.6 | 3.0 | 2.6 | 2.6 |
| 20 | 3.45 | 3.5 | 3.8 | 4.1 | 4.4 | 4.4 | 4.4 | 4.05 | 3.59 | 2.9 | 2.6 | 2.6 |
| 21 | 3.45 | 3.5 | 3.8 | 4.1 | 4.4 | 4.4 | 4.35 | 4.0 | a 3.55 | 2.9 | 2.6 | 2.6 |
| 22 | 3.45 | 3.55 | 3.85 | 4.1 | 4.4 | 4.4 | 4.35 | 4.0 | 3.5 | 2.95 | 2.6 | 2.58 |
| 23 | 3.45 | 3.55 | 3.9 | 4.1 | 4.4 | 4.4 | 4.35 | 4.0 | 3.5 | 2.85 | 2.6 | 2.6 |
| 24 | 3.45 | 3.6 | 3.95 | 4.2 | 4.4 | 4.4 | 4.3 | 4.0 | 3.5 | 2.85 | 2.6 | 2.68 |
| 25 | 3.45 | 3.6 | ...... | 4.2 | 4.4 | 4.4 | 4.3 | 4.0 | 3.4 | a 2.85 | 2.6 | 2.55 |
| 26 | 3.45 | 3.6 | ...... | 4.2 | 4.4 | 4.4 | 4.3 | 4.0 | 3.4 | a 2.85 | 2.7 | 2.58 |
| 27 | 3.45 | 3.6 | ...... | 4.2 | 4.4 | 4.4 | 4.3 | 4.0 | 3.4 | a 2.8 | 2.8 | 2.6 |
| 28 | 3.45 | 3.6 | ...... | 4.1 | 4.4 | 4.5 | 4.25 | 4.0 | 3.4 | a 2.8 | 2.6 | 2.62 |
| 29 | 3.45 | 3.6 | ...... | 4.2 | ...... | 4.6 | 4.25 | 4.0 | 3.4 | 2.78 | 2.6 | 2.65 |
| 30 | 3.45 | 3.65 | ...... | 4.2 | ...... | 4.5 | 4.25 | 3.95 | 3.35 | 2.79 | 2.65 | 2.65 |
| 31 | 3.45 | ...... | ...... | 4.2 | ...... | 4.5 | ...... | 3.95 | ...... | 2.78 | 2.55 | ...... |
| **1905–6.** | | | | | | | | | | | | |
| 1 | 2.7 | 2.81 | 3.25 | 3.5 | 3.65 | 3.75 | 4.25 | 5.0 | 4.85 | 4.4 | 3.5 | 2.9 |
| 2 | 2.65 | 2.8 | 3.3 | 3.45 | 3.65 | 3.9 | 4.2 | 5.05 | 4.85 | 4.35 | 3.5 | 2.85 |
| 3 | 2.7 | 2.81 | 3.29 | 3.4 | 3.65 | 3.85 | 4.2 | 5.0 | 4.9 | 4.4 | 3.5 | 2.9 |
| 4 | 2.7 | 2.84 | 3.2 | 3.5 | 3.65 | 3.7 | 4.2 | 4.95 | 4.9 | 4.4 | 3.45 | 2.9 |
| 5 | 2.9 | 2.82 | 3.2 | 3.5 | 3.65 | 3.7 | 4.2 | 5.0 | 4.95 | 4.3 | 3.45 | 2.9 |
| 6 | 2.9 | 2.88 | 3.2 | 3.45 | 3.6 | 3.7 | 4.3 | 5.0 | 4.8 | 4.3 | 3.4 | 2.85 |
| 7 | 2.95 | 2.86 | 3.21 | 3.45 | 3.6 | 3.7 | 4.35 | 4.95 | 4.8 | 4.25 | 3.35 | 2.95 |
| 8 | 2.7 | 2.99 | 3.23 | 3.45 | 3.6 | 3.7 | 4.45 | 4.95 | 4.85 | 4.3 | 3.3 | 2.95 |
| 9 | 2.9 | 2.99 | 3.24 | 3.5 | 3.6 | 3.75 | 4.4 | 5.0 | 4.8 | 4.25 | 3.3 | a 2.9 |
| 10 | 2.8 | 2.98 | 3.28 | 3.5 | 3.6 | 3.75 | 4.5 | 5.05 | 4.95 | 4.2 | 3.3 | 2.8 |
| 11 | 2.75 | 2.99 | 3.25 | 3.5 | 3.6 | 3.7 | 4.5 | 5.05 | 5.0 | 4.15 | 3.3 | 2.8 |
| 12 | 2.8 | 2.9 | 3.26 | 3.5 | 3.6 | 3.85 | 4.5 | 4.9 | 4.9 | 4.15 | 3.2 | 2.85 |
| 13 | 2.8 | 2.95 | 3.27 | 3.5 | 3.6 | 3.9 | 4.55 | 4.9 | 4.75 | 4.15 | 3.15 | 2.8 |
| 14 | 2.8 | 2.95 | 3.24 | 3.6 | 3.6 | 3.9 | 4.6 | 5.1 | 4.7 | 4.05 | 3.2 | 2.8 |
| 15 | 2.7 | 2.95 | 3.34 | 3.55 | 3.65 | 3.95 | 4.65 | 5.0 | 4.8 | 4.05 | 3.15 | 2.8 |
| 16 | 2.8 | 2.9 | 3.26 | 3.8 | 3.6 | 3.9 | 4.75 | 4.9 | 4.75 | 4.05 | 3.15 | 2.85 |
| 17 | 2.8 | 2.9 | 3.33 | 3.8 | 3.65 | 3.9 | 4.8 | 4.9 | 4.7 | 4.05 | 3.15 | 2.85 |
| 18 | 2.8 | 2.9 | 3.32 | 3.8 | 3.75 | 3.95 | 4.8 | 5.15 | 4.65 | 4.00 | 3.1 | 2.85 |
| 19 | 2.8 | 3.2 | 3.32 | 3.85 | 3.65 | 3.9 | 4.8 | 4.95 | 4.6 | 3.95 | 3.1 | 2.85 |
| 20 | 2.85 | 3.1 | 3.26 | 3.8 | 3.65 | 3.95 | 4.85 | 4.9 | 4.65 | 3.95 | 3.05 | 2.85 |
| 21 | 2.85 | 3.3 | 3.27 | 3.85 | 3.7 | 4.0 | 4.9 | 4.85 | 4.55 | 3.95 | 3.1 | 2.85 |
| 22 | 2.79 | 3.2 | 3.33 | 3.7 | 3.7 | 3.95 | 4.95 | 4.8 | 4.6 | 3.85 | 3.0 | 2.8 |
| 23 | 2.8 | 3.15 | 3.3 | 3.75 | 3.75 | 4.15 | 5.0 | 4.85 | 4.6 | 3.8 | 2.95 | 2.8 |
| 24 | 2.85 | 3.1 | 3.32 | 3.75 | 3.7 | 3.95 | 4.95 | 4.9 | 4.6 | 3.75 | 3.0 | 2.9 |
| 25 | 2.81 | 3.2 | 3.29 | 3.7 | 3.7 | 4.05 | 4.95 | 5.1 | 4.55 | 3.75 | 3.0 | 2.9 |
| 26 | 2.8 | 3.25 | 3.35 | 3.7 | 3.85 | 4.0 | 4.95 | 5.0 | 4.55 | 3.7 | 3.05 | 2.85 |
| 27 | 2.89 | 3.15 | 3.36 | 3.7 | 3.7 | 4.0 | 5.05 | 4.95 | 4.5 | 3.65 | 3.0 | 2.85 |
| 28 | 2.88 | 3.15 | 3.33 | 3.7 | 3.6 | 4.05 | 5.1 | 5.0 | 4.5 | 3.7 | 2.9 | 2.85 |
| 29 | 2.88 | 3.4 | 3.4 | 3.7 | ...... | 4.1 | 5.0 | 4.9 | 4.45 | 3.6 | 3.0 | 2.85 |
| 30 | 2.81 | 3.2 | 3.53 | 3.7 | ...... | 4.2 | 4.95 | 4.9 | 4.45 | 3.55 | 2.9 | 2.85 |
| 31 | 2.9 | ...... | 3.53 | 3.65 | ...... | 4.2 | ...... | 4.9 | ...... | 3.55 | 2.9 | ...... |

a Estimated.

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904-1912*—Contd.

**Gage at bridge.**

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | 1908. | | | | 1908. | | | |
| 1 | 2.58 | 3.19 | 3.37 | 11 | | | 3.40 | 21 | | 3.30 | |
| 2 | | 3.26 | 3.38 | 12 | | 3.23 | 3.34 | 22 | 3.11 | 3.30 | 3.48 |
| 3 | 2.51 | 3.20 | 3.40 | 13 | 2.75 | 3.25 | 3.47 | 23 | 3.11 | 3.32 | |
| 4 | 2.59 | 3.17 | 3.44 | 14 | | 3.25 | 3.41 | 24 | 3.14 | 3.35 | 3.48 |
| 5 | 2.55 | 3.20 | 3.43 | 15 | | 3.27 | 3.40 | 25 | 3.23 | 3.35 | 3.50 |
| 6 | 2.58 | 3.18 | 3.43 | 16 | 3.01 | 3.25 | 3.4 | 26 | | 3.34 | 3.48 |
| 7 | 2.58 | | 3.42 | 17 | | | 3.48 | 27 | | 3.35 | |
| 8 | 2.72 | | 3.53 | 18 | | 3.28 | 3.48 | 28 | 3.33 | 3.36 | |
| 9 | 2.68 | | 3.44 | 19 | 3.16 | 3.50 | 3.50 | 29 | 3.30 | | 3.46 |
| 10 | 2.75 | 3.24 | 3.42 | 20 | 3.20 | 3.34 | 3.50 | 30 | 3.16 | 3.25 | |
| | | | | | | | | 31 | 3.18 | | 3.50 |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | | | 4.04 | 4.3 | 4.2 | 4.45 | 5.4 | 5.05 | 4.15 | 3.35 | 2.75 | 2.55 |
| 2 | | | 4.18 | 4.25 | 4.3 | 4.45 | 5.7 | 5.05 | 4.1 | 3.35 | 2.75 | 2.55 |
| 3 | | | 4.18 | 4.25 | 4.3 | 4.5 | 5.4 | 5.1 | 4.1 | 3.5 | 2.8 | 2.6 |
| 4 | | | 4.20 | 4.25 | 4.25 | 4.55 | 5.4 | 5.1 | 4.15 | 3.35 | 2.8 | 2.6 |
| 5 | | | 4.22 | 4.25 | 4.2 | 4.6 | 5.4 | 5.05 | 4.1 | 3.3 | 2.75 | 2.6 |
| 6 | | | 4.23 | 4.25 | 4.2 | 4.65 | 5.35 | 5.05 | 4.1 | 3.3 | 2.7 | 2.55 |
| 7 | | | 4.32 | 4.25 | 4.2 | 4.7 | 5.35 | 5.0 | 4.0 | 3.25 | 2.75 | 2.55 |
| 8 | | 3.19 | 4.32 | 4.25 | 4.2 | 4.75 | 5.4 | 4.95 | 4.0 | 3.2 | 2.75 | 2.6 |
| 9 | | 3.04 | 4.32 | 4.25 | 4.25 | 4.75 | 5.4 | 4.95 | 4.0 | 3.2 | 2.75 | 2.6 |
| 10 | | 3.01 | 4.32 | 4.25 | 4.2 | 4.85 | 5.4 | 4.9 | 4.0 | 3.2 | 2.75 | 2.55 |
| 11 | | 3.04 | 4.32 | 4.25 | 4.2 | 4.9 | 5.4 | 4.75 | 4.0 | 3.2 | 2.7 | 2.6 |
| 12 | | 3.04 | 4.34 | 4.4 | 4.2 | 4.9 | 5.35 | 4.75 | 4.0 | 3.2 | 2.65 | 2.6 |
| 13 | | 3.04 | 4.34 | 4.4 | 4.25 | 4.96 | 5.35 | 4.55 | 4.0 | 3.2 | 2.65 | 2.6 |
| 14 | | 3.06 | 4.30 | 4.3 | 4.2 | 5.0 | 5.3 | 4.45 | 3.95 | 3.15 | 2.65 | 2.55 |
| 15 | | 3.06 | 4.31 | 4.25 | 4.2 | 5.0 | 5.3 | 4.45 | 3.85 | 3.15 | 2.6 | 2.55 |
| 16 | | 3.09 | 4.27 | 4.2 | 4.2 | 5.05 | 5.3 | 4.55 | 3.75 | 3.05 | 2.6 | 2.6 |
| 17 | | 3.09 | 4.24 | 4.2 | 4.25 | 5.05 | 5.35 | 4.5 | 3.8 | 3.0 | 2.65 | 2.55 |
| 18 | | 3.09 | 4.23 | 4.15 | 4.2 | 5.2 | 5.4 | 4.55 | 3.8 | 3.0 | 2.65 | 2.55 |
| 19 | | 3.15 | 4.25 | 4.2 | 4.2 | 5.15 | 5.35 | 4.5 | 3.8 | 3.0 | 2.6 | 2.7 |
| 20 | | 3.38 | 4.24 | 4.2 | 4.25 | 5.15 | 5.3 | 4.5 | 3.6 | 3.0 | 2.6 | 2.65 |
| 21 | | 3.42 | 4.23 | 4.15 | 4.3 | 5.2 | 5.25 | 4.45 | 3.55 | 3.05 | 2.6 | 2.6 |
| 22 | | 3.54 | 4.23 | 4.2 | 4.25 | 5.2 | 5.25 | 4.45 | 3.55 | 2.95 | 2.6 | 2.6 |
| 23 | | 3.61 | 4.23 | 4.2 | 4.25 | 5.3 | 5.25 | 4.45 | 3.5 | 2.95 | 2.55 | 2.6 |
| 24 | | 3.66 | 4.24 | 4.25 | 4.3 | 5.3 | 5.2 | 4.45 | 3.5 | 2.95 | 2.55 | 2.6 |
| 25 | | 3.71 | 4.22 | 4.3 | 4.35 | 5.35 | 5.3 | 4.35 | 3.5 | 2.95 | 2.55 | 2.6 |
| 26 | | | 4.21 | 4.25 | 4.3 | 5.4 | 5.15 | 4.35 | 3.5 | 2.9 | 2.6 | 2.6 |
| 27 | | 3.78 | 4.20 | 4.2 | 4.3 | 5.4 | 5.25 | 4.25 | 3.45 | 2.9 | 2.55 | 2.6 |
| 28 | | 3.84 | 4.20 | 4.2 | 4.45 | 5.35 | 5.15 | 4.2 | 3.5 | 2.9 | 2.6 | 2.65 |
| 29 | | 3.89 | 4.20 | 4.2 | | 5.4 | 5.05 | 4.15 | 3.45 | 2.9 | 2.6 | 2.6 |
| 30 | | 3.94 | 4.24 | 4.25 | | 5.4 | 5.1 | 4.1 | 3.45 | 2.9 | 2.6 | 2.6 |
| 31 | | 3.99 | 4.26 | 4.2 | | 5.4 | | 4.2 | | 2.85 | 2.6 | |
| 1910-11. | | | | | | | | | | | | |
| 1 | 2.6 | 3.05 | 3.65 | 4.16 | 4.20 | 4.00 | 4.17 | 5.05 | 4.85 | 4.10 | | 2.70 |
| 2 | 2.7 | 3.15 | 3.65 | 4.15 | 4.25 | 3.99 | 4.10 | 5.07 | 4.82 | 4.10 | | 2.70 |
| 3 | 2.7 | 2.95 | 3.7 | 4.15 | 4.11 | 4.05 | 4.25 | 5.00 | 4.79 | 4.09 | | 2.65 |
| 4 | 2.65 | 2.95 | 3.65 | 4.13 | 4.05 | 4.00 | 4.30 | 5.02 | 4.79 | 4.03 | | 2.65 |
| 5 | 2.75 | 2.95 | 3.7 | 4.11 | 4.05 | 4.05 | 4.00 | 5.05 | 4.83 | 4.00 | | 2.65 |
| 6 | 2.75 | 2.9 | 3.75 | 4.10 | 4.00 | 4.17 | 4.35 | 5.10 | 4.69 | 4.01 | | 2.63 |
| 7 | 2.75 | 3.0 | 3.75 | 4.15 | 4.02 | 4.15 | 4.35 | 5.10 | 4.70 | 4.00 | | 2.65 |
| 8 | 2.75 | 3.15 | 3.8 | 4.10 | 4.00 | 3.99 | 4.57 | 5.07 | 4.69 | 3.97 | | 2.65 |
| 9 | 2.85 | 3.1 | 3.95 | 4.25 | 4.00 | 4.00 | 4.65 | 5.02 | 4.68 | 3.94 | | 2.65 |
| 10 | 2.85 | 3.25 | 3.95 | 4.26 | 4.15 | 3.96 | 4.60 | 5.07 | 4.60 | 3.89 | | 2.65 |
| 11 | 2.9 | 3.0 | 3.95 | 4.23 | 4.18 | 3.95 | 4.70 | 5.05 | 4.60 | 3.85 | | 2.65 |
| 12 | 3.0 | 3.0 | 3.95 | 4.25 | 4.17 | 3.95 | 4.73 | 5.05 | 4.61 | | | 2.60 |
| 13 | 2.9 | 3.05 | 3.95 | 4.23 | 4.10 | 3.95 | 4.70 | 5.02 | 4.60 | | | 2.62 |
| 14 | 2.85 | 3.05 | 4.0 | 4.20 | 4.10 | 3.95 | 4.65 | 5.05 | 4.56 | | | 2.62 |
| 15 | 2.85 | 3.1 | 4.0 | 4.25 | 4.05 | 4.05 | 4.70 | 5.05 | 4.56 | | | 2.62 |
| 16 | 2.85 | 3.05 | 4.0 | 4.20 | 4.10 | 4.00 | 4.70 | 5.15 | 4.51 | | | 2.60 |
| 17 | 2.9 | 3.1 | 4.2 | 4.30 | 4.06 | 4.05 | 4.87 | 5.05 | 4.47 | | | 2.60 |
| 18 | 2.9 | 3.15 | 4.1 | 4.35 | 4.10 | 4.01 | 4.85 | 5.20 | 4.43 | | | 2.57 |
| 19 | 3.0 | 3.1 | 4.1 | 4.25 | 4.05 | 4.05 | 4.90 | 5.02 | 4.47 | | | 2.59 |
| 20 | 2.95 | 3.1 | 4.1 | 4.25 | 4.16 | 4.06 | 4.91 | 4.95 | 4.48 | | 2.72 | 2.62 |

[illegible]

*Daily gage height, in feet, of Link River at Klamath Falls, Oreg., for 1904–1912*—Contd.

**Fries automatic gage**

| Day. | June. | July. | Aug. | Sept. | Day. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | | 1908. | | | | |
| 1 | ....... | 1.63 | 1.21 | 0.80 | 16 | 1.90 | 1.38 | 1.00 | 1.00 |
| 2 | ....... | 1.64 | 1.22 | .77 | 17 | 1.86 | 1.40 | 1.01 | .90 |
| 3 | ....... | 1.58 | 1.16 | .76 | 18 | 1.90 | 1.37 | 1.00 | .90 |
| 4 | ....... | 1.62 | 1.16 | .74 | 19 | 1.82 | 1.35 | 1.02 | .95 |
| 5 | ....... | 1.58 | 1.15 | .80 | 20 | 1.52 | 1.30 | 1.02 | .97 |
| 6 | 1.84 | 1.54 | 1.13 | .80 | 21 | 1.72 | 1.36 | 1.02 | .96 |
| 7 | 1.84 | 1.46 | 1.10 | .91 | 22 | 1.68 | 1.30 | 1.03 | .98 |
| 8 | 1.84 | 1.46 | 1.08 | .86 | 23 | ....... | 1.30 | 1.02 | 1.16 |
| 9 | 1.82 | 1.46 | 1.10 | .86 | 24 | ....... | 1.30 | 1.10 | 1.10 |
| 10 | 1.80 | 1.46 | 1.08 | .86 | 25 | ....... | 1.34 | .90 | 1.00 |
| 11 | 1.80 | 1.42 | 1.06 | .83 | 26 | ....... | 1.30 | .87 | .94 |
| 12 | 1.78 | 1.40 | 1.13 | .87 | 27 | 1.78 | 1.26 | .87 | .93 |
| 13 | 1.77 | 1.36 | 1.16 | .90 | 28 | 1.68 | 1.22 | .85 | .94 |
| 14 | 1.80 | 1.42 | 1.08 | .89 | 29 | 1.65 | 1.25 | .98 | .94 |
| 15 | 1.86 | 1.50 | 1.02 | .94 | 30 | 1.66 | 1.17 | .80 | .96 |
| | | | | | 31 | ....... | 1.14 | .80 | ....... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | | | | |
| 1 | 1.20 | ....... | 1.90 | 1.68 | 2.10 | 2.75 | ....... | 2.46 | 2.25 | 1.60 | 1.25 | 0.95 |
| 2 | 1.30 | 1.55 | 1.95 | 1.69 | 2.00 | 2.80 | ....... | 2.45 | 2.25 | 1.55 | 1.12 | .95 |
| 3 | 1.05 | 1.62 | 1.95 | 1.70 | 2.70 | ....... | ....... | 2.44 | 2.24 | 1.65 | 1.14 | .92 |
| 4 | 1.00 | 1.60 | 1.90 | 1.71 | 2.60 | ....... | ....... | 2.60 | 2.32 | 1.70 | 1.15 | .95 |
| 5 | .96 | 1.62 | 1.79 | 1.82 | 2.70 | ....... | ....... | 2.43 | 2.30 | 1.58 | 1.23 | .95 |
| 6 | .98 | 1.64 | 1.68 | 1.85 | 2.50 | 2.90 | ....... | 2.48 | 2.25 | 1.60 | 1.23 | .93 |
| 7 | .96 | 1.64 | 1.70 | 1.85 | 2.75 | 2.90 | ....... | 2.43 | ....... | 1.48 | 1.10 | .92 |
| 8 | .94 | ....... | 1.75 | 1.85 | 2.75 | 2.98 | ....... | 2.40 | ....... | 1.51 | 1.10 | .92 |
| 9 | 1.00 | ....... | 1.65 | 2.06 | 2.73 | 3.00 | ....... | 2.42 | ....... | 1.52 | .93 | 1.03 |
| 10 | 1.16 | ....... | 1.60 | 1.98 | 2.73 | 3.00 | ....... | 2.40 | ....... | 1.49 | .92 | 1.12 |
| 11 | 1.35 | ....... | 1.65 | 1.97 | 2.72 | 2.95 | 2 70 | 2.45 | ....... | 1.54 | .96 | .98 |
| 12 | 1.30 | ....... | 1.75 | 1.96 | 2.70 | 2.95 | 2.65 | 2.37 | ....... | 1.52 | 1.04 | .98 |
| 13 | 1.20 | ....... | ....... | 1.96 | ....... | 2.88 | 2.68 | 2.38 | ....... | 1.55 | .98 | .95 |
| 14 | .80 | ....... | 1.70 | ....... | 2.65 | 2.75 | 2.68 | 2.38 | ....... | 1.58 | 1.00 | .95 |
| 15 | .58 | ....... | 1.70 | 2.05 | 2.65 | 2.80 | 2.65 | 2.38 | ....... | 1.46 | 1.02 | .90 |
| 16 | .62 | ....... | 1.55 | 2.12 | 2.75 | 2.75 | 2.60 | ....... | ....... | 1.48 | .98 | 1.00 |
| 17 | .70 | ....... | 1.70 | 2.12 | 2.70 | 2.85 | 2.60 | ....... | ....... | 1.48 | 1.00 | 1.00 |
| 18 | ....... | ....... | 1.70 | 2.13 | 2.68 | 2 70 | 2.75 | 2.40 | ....... | 1.48 | 1.02 | .95 |
| 19 | 1.95 | ....... | 1.70 | 2.08 | 2.75 | 2.70 | 2.80 | 2.44 | 2.00 | 1.38 | 1.00 | 1.00 |
| 20 | 1.92 | ....... | 1.70 | 1.92 | 2.75 | 2.10 | 2.80 | 2.42 | 1.90 | 1.24 | 1.13 | 1.06 |
| 21 | 1.52 | 1.60 | 1.72 | 2.15 | 3.10 | 2.65 | 2.64 | 2.38 | 1.85 | 1.28 | 1.00 | .92 |
| 22 | 1.58 | 1.65 | 1.73 | ....... | 2.88 | 2.70 | 2.57 | 2.30 | 1.79 | 1.30 | 1.08 | .88 |
| 23 | 1.59 | 1.65 | 1.74 | 2.50 | 2.70 | 2.65 | 2.58 | 2.28 | 1.81 | 1.34 | .97 | .70 |
| 24 | 1.60 | 1.65 | 1.73 | 2.25 | 2.70 | 2.65 | ....... | 2.25 | 1.86 | 1.35 | .97 | .71 |
| 25 | 1.62 | 1.60 | 1.72 | 2.40 | 2.93 | 2.70 | ....... | 2.32 | 1.76 | 1.38 | .94 | .91 |
| 26 | 1.62 | 1.52 | ....... | 2.65 | 2.92 | 2.68 | ....... | 2.33 | 1.71 | 1.40 | 1.03 | 1.05 |
| 27 | 1.60 | 1.54 | ....... | 2.68 | 2.88 | 2.69 | 2.60 | 2.30 | 1.80 | 1.25 | 1.08 | .92 |
| 28 | 1.54 | 1.58 | ....... | 2.67 | 2.85 | ....... | 2.60 | 2.18 | 1.58 | 1.14 | .85 | .75 |
| 29 | 1.35 | 1.65 | ....... | 2.48 | ....... | ....... | 2.50 | 2.15 | .80 | 1.12 | .95 | .90 |
| 30 | 1.56 | 1.62 | 1.70 | 2.40 | ....... | ....... | 2.48 | 2.19 | 1.57 | 1.08 | .90 | .88 |
| 31 | 1.56 | ....... | 1.69 | 2.10 | ....... | ....... | ....... | 2.21 | ....... | 1.20 | .90 | ....... |
| 1909–10. | | | | | | | | | | | | |
| 1 | 1.05 | 1.24 | ....... | 2.42 | 2.27 | 2.36 | 3.30 | 2.80 | 2.75 | 1.90 | 1.15 | 0.90 |
| 2 | 1.00 | 1.34 | ....... | 2.40 | 2.24 | 2.48 | 3.55 | 2.78 | 2.48 | 1.90 | 1.10 | .91 |
| 3 | .98 | 1.36 | ....... | 2.37 | 2.24 | 2.55 | 3.35 | 2.80 | 2.51 | 2.20 | 1.00 | 1.00 |
| 4 | .90 | 1.36 | ....... | 2.34 | 2.24 | 2.65 | 3.32 | 2.71 | 2.55 | 2.15 | 1.10 | .92 |
| 5 | .93 | 1.37 | ....... | 2.31 | 2.04 | 2.75 | 3.35 | 2.72 | 2.46 | 2.15 | .98 | .89 |
| 6 | 1.20 | ....... | 2.60 | 2.28 | 2.04 | 2.84 | 3.25 | 2.68 | 2.50 | 2.20 | 1.08 | .98 |
| 7 | .90 | 1.10 | 2.59 | 2.28 | 2.04 | 2.89 | 3.22 | 2.48 | 2.45 | 2.35 | 1.02 | 1.00 |
| 8 | .90 | 1.30 | 2.59 | 2.37 | 2.03 | 2.97 | 3.22 | 2.40 | 2.41 | 2.32 | 1.02 | .88 |
| 9 | 1.20 | 1.40 | 2.59 | 2.36 | 2.03 | 3.01 | 2.78 | 2.15 | 2.41 | 2.35 | .95 | .88 |
| 10 | 1.22 | 1.65 | 2.60 | 2.35 | 2.02 | 3.05 | 3.05 | 2.17 | 2.60 | 2.35 | .95 | .95 |
| 11 | 1.30 | ....... | ....... | 2.31 | 2.02 | 3.08 | 3.22 | 2.25 | 2.70 | 2.52 | .93 | 1.08 |
| 12 | 1.30 | ....... | ....... | 2.20 | 2.07 | 3.14 | 3.22 | 2.28 | 2.56 | 2.50 | 1.02 | .99 |
| 13 | 1.44 | ....... | ....... | 2.18 | 2.08 | 3.15 | 3.15 | 2.26 | 2.60 | 2.42 | 1.08 | .80 |
| 14 | 1.42 | ....... | ....... | 2.18 | 2.10 | 3.15 | 3.10 | 2.29 | 2.20 | 2.05 | 1.03 | .89 |
| 15 | 1.40 | ....... | ....... | 2.18 | 2.09 | 3.17 | 3.08 | 2.25 | 2.05 | 2.20 | 1.06 | .87 |

[illegible] height [illegible]

**Fries automatic gage**

| Day | [illegible] |
|---|---|
| [illegible] | [illegible] |

*Rating tables for [illegible] River at [illegible] Fr[illegible]*

**Gage at bridge, May 15, 1904, to December 31, 1906**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 2.40 | 9[illegible] | 3.[illegible] | [illegible] | 4.[illegible] | [illegible] | [illegible] | [illegible] |
| 2.50 | [illegible] | [illegible] | [illegible] | 4.[illegible] | [illegible] | [illegible] | [illegible] |
| 2.60 | 1,0[illegible] | [illegible] | [illegible] | 4.[illegible] | [illegible] | [illegible] | [illegible] |
| 2.70 | 1,[illegible] | [illegible] | [illegible] | 4.[illegible] | [illegible] | [illegible] | [illegible] |
| 2.80 | 1,150 | [illegible] | [illegible] | [illegible] | 4,[illegible] | [illegible] | [illegible] |
| 2.90 | 1,22[illegible] | 4.[illegible] | [illegible] | [illegible] | 4,[illegible] | [illegible] | [illegible] |
| 3.00 | 1,3[illegible] | 4.[illegible] | [illegible] | [illegible] | 4,[illegible] | [illegible] | [illegible] |
| 3.10 | 1,3[illegible] | 4.[illegible] | [illegible] | 5.[illegible] | 4,[illegible] | [illegible] | [illegible] |
| 3.20 | 1,48[illegible] | 4.[illegible] | [illegible] | [illegible] | 4,[illegible] | | |
| 3.30 | 1,58[illegible] | 4.4[illegible] | 3,[illegible] | [illegible] | [illegible] | | |
| 3.40 | 1,69[illegible] | 4.5[illegible] | 3,2[illegible] | 5.[illegible] | 5,[illegible] | | |

NOTE.—This table is not applicable for ice or obstructed channel conditions. It is based on [illegible] measurements made during 1904 to 1906 and is not well defined.

**Fries automatic gage, June 6 to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.60 | 625 | 1.00 | 994 | 1.40 | 1,474 | 1.[illegible] | [illegible] |
| .70 | 703 | 1.10 | 1,10[illegible] | 1.50 | 1,61[illegible] | 1.[illegible] | [illegible] |
| .80 | 792 | 1.20 | 1,224 | 1.60 | 1,75[illegible] | 2.00 | [illegible] |
| .90 | 888 | 1.30 | 1,344 | 1.70 | 1,90[illegible] | | |

NOTE.—Table applicable only for open channel. It is based on eighteen discharge measurements made during 1906 and is well defined.

*Daily discharge, in second-feet, of Link River at Klamath Falls, Oreg., for 1908–1910.*

| Day. | Mar. | Apr. | May. | June. | Day. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1908. | | | | | 1908. | | | | |
| 1 | | 3,290 | 2,690 | 2,510 | 16 | 2,610 | 2,670 | 2,430 | |
| 2 | | 3,170 | 2,670 | 2,530 | 17 | 2,590 | 2,560 | 2,380 | |
| 3 | | 3,230 | 2,670 | 2,420 | 18 | 2,780 | 2,650 | 2,300 | |
| 4 | | 3,450 | 2,720 | 2,260 | 19 | 2,670 | 2,860 | 2,520 | |
| 5 | | 3,230 | 2,730 | 2,130 | 20 | 2,650 | 2,710 | 2,490 | |
| 6 | | 3,410 | 2,620 | | 21 | 2,760 | 2,690 | 2,750 | |
| 7 | 2,600 | 3,540 | 2,610 | | 22 | 2,650 | 2,700 | 2,640 | |
| 8 | 2,610 | 3,250 | 2,970 | | 23 | 2,650 | 2,640 | 2,580 | |
| 9 | 2,620 | 3,050 | 2,770 | | 24 | 2,570 | 2,960 | 2,880 | |
| 10 | 2,530 | 2,870 | 2,600 | | 25 | 2,700 | 3,000 | 2,900 | |
| 11 | 2,580 | 3,020 | 2,600 | | 26 | 3,020 | 2,970 | 2,570 | |
| 12 | 2,630 | 3,050 | 2,750 | | 27 | 3,100 | 3,180 | 2,550 | |
| 13 | 2,380 | 2,960 | 2,540 | | 28 | 3,120 | 3,180 | 2,470 | |
| 14 | 2,530 | 3,020 | 2,230 | | 29 | 2,970 | 3,000 | 2,620 | |
| 15 | 2,440 | 2,770 | 2,380 | | 30 | 3,070 | 2,670 | 2,790 | |
| | | | | | 31 | 3,180 | | 2,660 | |

NOTE.—Daily discharge computed from the gage heights at the bridge, taking into account also the readings of the taffrail log and the direction and force of the wind.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 1,860 | 2,530 | 3,670 | 3,560 | 3,150 | 2,780 | 1,750 | 1,280 | 941 |
| 2 | 1,880 | 2,360 | 3,760 | 3,570 | 3,130 | 2,780 | 1,680 | 1,130 | [illegible] |
| 3 | 1,890 | 3,580 | 3,810 | 3,570 | 3,110 | 2,770 | 1,820 | 1,150 | 909 |
| 4 | 1,900 | 3,400 | 3,860 | 3,570 | 3,400 | 2,900 | 1,890 | 1,170 | 941 |
| 5 | 2,070 | 3,580 | 3,900 | 3,570 | 3,090 | 2,870 | 1,720 | 1,260 | 941 |
| 6 | 2,120 | 3,220 | 3,950 | 3,570 | 3,180 | 2,780 | 1,750 | 1,200 | [illegible] |
| 7 | 2,120 | 3,670 | 3,950 | 3,580 | 3,090 | 2,740 | 1,580 | 1,110 | 909 |
| 8 | 2,120 | 3,670 | 4,100 | 3,580 | 3,040 | 2,700 | 1,630 | 1,110 | 909 |
| 9 | 2,440 | 3,630 | 4,140 | 3,580 | 3,080 | 2,660 | 1,640 | 920 | [illegible] |
| 10 | 2,330 | 3,630 | 4,140 | 3,580 | 3,040 | 2,630 | 1,600 | 909 | [illegible] |
| 11 | 2,310 | 3,620 | 4,040 | 3,580 | 3,130 | 2,600 | 1,670 | 952 | 973 |
| 12 | 2,300 | 3,580 | 4,040 | 3,490 | 2,990 | 2,570 | 1,640 | 1,040 | 973 |
| 13 | 2,300 | 3,540 | 3,910 | 3,540 | 3,010 | 2,540 | 1,680 | 973 | 941 |
| 14 | 2,370 | 3,490 | 3,670 | 3,540 | 3,010 | 2,510 | 1,720 | 994 | 941 |
| 15 | 2,440 | 3,490 | 3,760 | 3,490 | 3,010 | 2,480 | 1,560 | 1,020 | [illegible] |
| 16 | 2,560 | 3,670 | 3,670 | 3,400 | 3,020 | 2,450 | 1,580 | 973 | 994 |
| 17 | 2,560 | 3,580 | 3,860 | 3,400 | 3,080 | 2,420 | 1,580 | 994 | 994 |
| 18 | 2,580 | 3,540 | 3,580 | 3,670 | 3,040 | 2,390 | 1,580 | 1,020 | 941 |
| 19 | 2,500 | 3,670 | 3,580 | 3,760 | 3,110 | 2,360 | 1,450 | 994 | 994 |
| 20 | 2,230 | 3,670 | 2,530 | 3,760 | 3,080 | 2,200 | 1,270 | 1,140 | [illegible] |
| 21 | 2,620 | 4,340 | 3,490 | 3,470 | 3,010 | 2,120 | 1,320 | 994 | [illegible] |
| 22 | 2,920 | 3,910 | 3,580 | 3,350 | 2,870 | 2,020 | 1,340 | 1,080 | [illegible] |
| 23 | 3,220 | 3,580 | 3,490 | 3,360 | 2,840 | 2,060 | 1,400 | 962 | [illegible] |
| 24 | 2,780 | 3,580 | 3,490 | 3,370 | 2,780 | 2,140 | 1,410 | 963 | [illegible] |
| 25 | 3,040 | 4,010 | 3,580 | 3,380 | 2,900 | 1,980 | 1,450 | 930 | [illegible] |
| 26 | 3,490 | 3,990 | 3,540 | 3,390 | 2,920 | 1,900 | 1,470 | 1,080 | [illegible] |
| 27 | 3,540 | 3,910 | 3,560 | 3,400 | 2,870 | 2,040 | 1,280 | 1,080 | [illegible] |
| 28 | 3,530 | 3,860 | 3,560 | 3,400 | 2,670 | 1,720 | 1,150 | 840 | [illegible] |
| 29 | 3,180 | | 3,560 | 3,220 | 2,620 | 792 | 1,130 | 941 | [illegible] |
| 30 | 3,040 | | 3,560 | 3,180 | 2,680 | 1,710 | 1,080 | 888 | [illegible] |
| 31 | 2,530 | | 3,560 | | 2,720 | | 1,220 | 888 | |

*Daily discharge, in second-feet, of Link River at Klamath Falls, Oreg., for 1908–1910*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 1,050 | 1,270 | 2,510 | 2,900 | 2,740 | 3,140 | 4,930 | 4,240 | 2,660 | 1,640 | 1,120 | 1,010 |
| 2 | 994 | 1,400 | 2,710 | 2,820 | 2,900 | 3,140 | 5,570 | 4,240 | 2,590 | 1,640 | 1,120 | 1,010 |
| 3 | 973 | 1,420 | 2,710 | 2,820 | 2,900 | 3,230 | 4,930 | 4,340 | 2,590 | 1,800 | 1,150 | 1,040 |
| 4 | 888 | 1,420 | 2,740 | 2,820 | 2,820 | 3,320 | 4,930 | 4,340 | 2,660 | 1,640 | 1,150 | 1,040 |
| 5 | 920 | 1,440 | 2,770 | 2,820 | 2,740 | 3,400 | 4,930 | 4,240 | 2,590 | 1,580 | 1,120 | 1,040 |
| 6 | 1,220 | 1,280 | 2,790 | 2,820 | 2,740 | 3,490 | 4,830 | 4,240 | 2,590 | 1,580 | 1,090 | 1,010 |
| 7 | 888 | 1,110 | 2,930 | 2,820 | 2,740 | 3,580 | 4,830 | 4,150 | 2,450 | 1,540 | 1,120 | 1,010 |
| 8 | 888 | 1,480 | 2,930 | 2,820 | 2,740 | 3,680 | 4,930 | 4,060 | 2,450 | 1,480 | 1,120 | 1,040 |
| 9 | 1,220 | 1,340 | 2,930 | 2,820 | 2,820 | 3,680 | 4,930 | 4,060 | 2,450 | 1,480 | 1,120 | 1,040 |
| 10 | 1,250 | 1,310 | 2,930 | 2,820 | 2,740 | 3,860 | 4,930 | 3,960 | 2,450 | 1,490 | 1,120 | 1,010 |
| 11 | 1,340 | 1,340 | 2,930 | 2,820 | 2,740 | 3,960 | 4,930 | 3,680 | 2,450 | 1,490 | 1,090 | 1,040 |
| 12 | 1,340 | 1,340 | 2,960 | 3,060 | 2,740 | 3,960 | 4,830 | 3,680 | 2,450 | 1,480 | 1,060 | 1,040 |
| 13 | 1,530 | 1,340 | 2,960 | 3,060 | 2,820 | 4,060 | 4,830 | 3,320 | 2,450 | 1,480 | 1,060 | 1,040 |
| 14 | 1,500 | 1,350 | 2,900 | 2,900 | 2,740 | 4,150 | 4,730 | 3,140 | 2,380 | 1,440 | 1,060 | 1,010 |
| 15 | 1,470 | 1,350 | 2,920 | 2,820 | 2,740 | 4,150 | 4,730 | 3,140 | 2,240 | 1,440 | 1,040 | 1,010 |
| 16 | 941 | 1,380 | 2,850 | 2,740 | 2,740 | 4,240 | 4,730 | 3,320 | 2,110 | 1,340 | 1,040 | 1,040 |
| 17 | 888 | 1,380 | 2,800 | 2,740 | 2,820 | 4,240 | 4,830 | 3,230 | 2,180 | 1,300 | 1,060 | 1,010 |
| 18 | 703 | 1,380 | 2,790 | 2,660 | 2,740 | 4,530 | 4,930 | 3,320 | 2,180 | 1,300 | 1,060 | 1,010 |
| 19 | 792 | 1,440 | 2,820 | 2,740 | 2,740 | 4,440 | 4,830 | 3,230 | 2,180 | 1,300 | 1,040 | 1,090 |
| 20 | 748 | 1,670 | 2,800 | 2,740 | 2,820 | 4,440 | 4,730 | 3,230 | 1,920 | 1,300 | 1,040 | 1,060 |
| 21 | 1,110 | 1,710 | 2,790 | 2,660 | 2,900 | 4,530 | 4,630 | 3,140 | 1,860 | 1,340 | 1,040 | 1,040 |
| 22 | 1,220 | 1,850 | 2,790 | 2,740 | 2,820 | 4,530 | 4,630 | 3,140 | 1,860 | 1,260 | 1,040 | 1,040 |
| 23 | 1,220 | 1,930 | 2,790 | 2,740 | 2,820 | 4,730 | 4,630 | 3,140 | 1,800 | 1,260 | 1,010 | 1,040 |
| 24 | 1,220 | 2,000 | 2,800 | 2,820 | 2,900 | 4,730 | 4,530 | 3,140 | 1,800 | 1,260 | 1,010 | 1,040 |
| 25 | 1,220 | 2,060 | 2,770 | 2,900 | 2,980 | 4,830 | 4,730 | 2,980 | 1,800 | 1,260 | 1,010 | 1,040 |
| 26 | 1,220 | 2,150 | 2,760 | 2,820 | 2,900 | 4,930 | 4,440 | 2,980 | 1,800 | 1,220 | 1,040 | 1,040 |
| 27 | 1,220 | 2,230 | 2,740 | 2,740 | 2,900 | 4,930 | 4,630 | 2,820 | 1,740 | 1,220 | 1,010 | 1,040 |
| 28 | 1,220 | 2,300 | 2,740 | 2,740 | 3,140 | 4,830 | 4,440 | 2,740 | 1,800 | 1,220 | 1,040 | 1,060 |
| 29 | 1,220 | 2,370 | 2,740 | 2,740 | ...... | 4,930 | 4,240 | 2,660 | 1,740 | 1,220 | 1,040 | 1,040 |
| 30 | 1,050 | 2,440 | 2,800 | 2,820 | ...... | 4,930 | 4,340 | 2,590 | 1,740 | 1,220 | 1,040 | 1,040 |
| 31 | 1,160 | ...... | 2,840 | 2,740 | ...... | 4,930 | ...... | 2,740 | ...... | 1,190 | 1,040 | ...... |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910. | | | | 1910. | | | | 1910. | | | |
| 1 | 1,040 | 1,340 | 1,980 | 11 | 1,220 | 1,300 | 2,380 | 21 | 1,260 | 1,540 | 2,660 |
| 2 | 1,090 | 1,440 | 1,980 | 12 | 1,300 | 1,300 | 2,380 | 22 | 1,300 | 1,440 | 2,660 |
| 3 | 1,090 | 1,260 | 2,040 | 13 | 1,220 | 1,340 | 2,380 | 23 | 1,260 | 1,690 | 2,660 |
| 4 | 1,060 | 1,260 | 1,980 | 14 | 1,180 | 1,340 | 2,450 | 24 | 1,260 | 1,740 | 2,590 |
| 5 | 1,120 | 1,260 | 2,040 | 15 | 1,180 | 1,390 | 2,450 | 25 | 1,300 | 1,690 | 2,660 |
| 6 | 1,120 | 1,220 | 2,110 | 16 | 1,180 | 1,340 | 2,450 | 26 | 1,300 | 1,740 | 2,520 |
| 7 | 1,120 | 1,300 | 2,110 | 17 | 1,220 | 1,390 | 2,740 | 27 | 1,300 | 1,860 | 2,450 |
| 8 | 1,120 | 1,440 | 2,180 | 18 | 1,220 | 1,440 | 2,590 | 28 | 1,300 | 1,800 | 2,660 |
| 9 | 1,180 | 1,390 | 2,380 | 19 | 1,300 | 1,390 | 2,590 | 29 | 1,300 | 1,860 | 2,590 |
| 10 | 1,180 | 1,540 | 2,380 | 20 | 1,260 | 1,390 | 2,590 | 30 | 1,300 | 1,860 | 2,660 |
| | | | | | | | | 31 | 1,320 | ...... | 2,660 |

NOTE.—Discharge Jan. 1 to Nov. 7, 1909, based on automatic gage and fairly well defined rating curve. Discharge Nov. 8, 1909, to Dec. 31, 1910, based on gage at bridge and poorly defined rating curve. Condition became so bad in 1911 that no discharge was computed.

*Monthly discharge of Link River at Klamath Falls, Oreg., for 1904–1910.*

[Drainage area, 3,110 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1904.** | | | | | | | |
| May 15–31 | 9,015 | 8,140 | 8,640 | 2.78 | 1.76 | 291,300 | |
| June | 8,140 | 5,245 | 6,740 | 2.17 | 2.42 | 401,100 | |
| July | 5,140 | 3,060 | 4,123 | 1.33 | 1.53 | 253,500 | |
| August | 2,980 | 1,860 | 2,336 | .751 | .87 | 143,600 | |
| September | 1,800 | 1,535 | 1,662 | .535 | .60 | 98,900 | |
| **1904–5.** | | | | | | | |
| October | 1,745 | 1,585 | 1,686 | .542 | .62 | 103,700 | |
| November | 1,982 | 1,745 | 1,837 | .591 | .66 | 109,300 | |
| December | 2,520 | 1,860 | 2,185 | .702 | .81 | 134,400 | |
| January | 2,740 | 2,590 | 2,624 | .844 | .97 | 161,300 | |
| February | 3,230 | 2,740 | 3,103 | .998 | 1.04 | 172,300 | |
| March | 3,400 | 3,060 | 3,087 | .992 | 1.14 | 189,800 | |
| April | 3,230 | 2,820 | 3,106 | .999 | 1.11 | 184,800 | |
| May | 2,740 | 2,380 | 2,597 | .835 | .96 | 159,700 | |
| June | 2,380 | 1,638 | 2,004 | .645 | .72 | 119,200 | |
| July | 1,745 | 1,138 | 1,363 | .438 | .50 | 83,810 | |
| August | 1,144 | 985 | 1,051 | .338 | .39 | 64,620 | |
| September | 1,062 | 985 | 1,033 | .332 | .37 | 61,290 | |
| The year | 3,400 | 985 | 2,140 | .688 | 9.29 | 1,540,000 | |
| **1905–6.** | | | | | | | |
| October | 1,260 | 1,062 | 1,159 | .372 | .43 | 71,260 | |
| November | 1,690 | 1,150 | 1,330 | .428 | .48 | 79,140 | |
| December | 1,860 | 1,485 | 1,587 | .510 | .59 | 100,800 | |
| January | 2,240 | 1,690 | 1,950 | .627 | .72 | 120,000 | |
| February | 2,240 | 1,920 | 1,990 | .640 | .67 | 111,000 | |
| March | 2,740 | 2,040 | 2,320 | .746 | .86 | 143,000 | |
| April | 4,340 | 2,740 | 3,520 | 1.13 | 1.26 | 209,000 | |
| May | 4,440 | 3,770 | 4,080 | 1.31 | 1.51 | 251,000 | |
| June | 4,150 | 3,140 | 3,620 | 1.17 | 1.30 | 215,000 | |
| July | 3,060 | 1,860 | 2,490 | .800 | .92 | 153,000 | |
| August | 1,800 | 1,220 | 1,470 | .473 | .55 | 90,400 | |
| September | 1,260 | 1,150 | 1,190 | .383 | .43 | 70,800 | |
| The year | 4,440 | 1,062 | 2,230 | .717 | 9.72 | 1,610,000 | |
| **1906–7.** | | | | | | | |
| October | 1,300 | 1,150 | 1,200 | .386 | .44 | 73,800 | |
| November | 1,690 | 1,260 | 1,460 | .470 | .52 | 86,900 | |
| December | 1,920 | 1,540 | 1,740 | .560 | .65 | 107,000 | |
| January | 2,310 | 1,920 | 2,190 | .704 | .81 | 135,000 | C. |
| February | 4,240 | 2,310 | 3,530 | 1.14 | 1.19 | 196,000 | C. |
| March | 5,390 | 4,150 | 4,650 | 1.50 | 1.73 | 286,000 | C. |
| April | 5,790 | 5,350 | 5,630 | 1.81 | 2.02 | 335,000 | C. |
| May | 5,570 | 4,630 | 5,090 | 1.64 | 1.89 | 313,000 | C. |
| June | 7,710 | 3,260 | 4,020 | 1.29 | 1.44 | 239,000 | C. |
| July | 3,140 | 1,920 | 2,470 | .794 | .92 | 152,000 | C. |
| August | 1,860 | 1,440 | 1,570 | .505 | .58 | 96,500 | C. |
| September | 1,470 | 1,370 | 1,410 | .454 | .51 | 83,900 | C. |
| The year | 7,710 | 1,150 | 2,910 | .937 | 12.70 | 2,100,000 | |
| **1907–8.** | | | | | | | |
| October | 1,580 | 1,390 | 1,460 | .470 | .54 | 89,800 | C. |
| November | 1,710 | 1,560 | 1,630 | .524 | .58 | 97,000 | C. |
| December | 2,480 | 1,690 | 1,970 | .634 | .73 | 121,000 | C. |
| January | 2,820 | 2,450 | 2,660 | .855 | .99 | 164,000 | C. |
| February | 3,230 | 2,740 | 2,890 | .929 | 1.00 | 166,000 | C. |
| March | 3,180 | 2,380 | 2,730 | .878 | 1.01 | 168,000 | B. |
| April | 3,540 | 2,560 | 2,990 | .962 | 1.07 | 178,000 | B. |
| May | 2,970 | 2,230 | 2,620 | .842 | .97 | 161,000 | B. |
| June | 2,530 | 1,640 | 2,060 | .662 | .74 | 123,000 | A. |
| July | 1,810 | 1,150 | 1,470 | .473 | .55 | 90,400 | A. |
| August | 1,250 | 792 | 1,040 | .335 | .39 | 64,000 | A. |
| September | 1,180 | 739 | 900 | .290 | .32 | 53,600 | A. |
| The year | 3,540 | 739 | 2,040 | .655 | 8.89 | 1,480,000 | |

*Monthly discharge of Link River at Klamath Falls, Oreg., for 1904-1910*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1908-9.** | | | | | | | |
| October | 2,260 | 612 | 1,350 | 0.434 | 0.50 | 83,000 | A. |
| November | 1,820 | 1,640 | 1,770 | .569 | .63 | 105,000 | A. |
| December | 2,260 | 1,680 | 1,940 | .624 | .72 | 119,000 | A. |
| January | 3,540 | 1,860 | 2,540 | .817 | .94 | 156,000 | A. |
| February | 4,340 | 2,360 | 3,580 | 1.15 | 1.20 | 199,000 | B. |
| March | 4,140 | 2,530 | 3,710 | 1.19 | 1.37 | 228,000 | B. |
| April | 3,760 | 3,180 | 3,500 | 1.12 | 1.25 | 208,000 | B. |
| May | 3,400 | 2,620 | 2,990 | .961 | 1.11 | 184,000 | A. |
| June | 2,900 | 792 | 2,350 | .756 | .84 | 140,000 | B. |
| July | 1,890 | 1,080 | 1,520 | .489 | .56 | 93,500 | A. |
| August | 1,280 | 840 | 1,030 | .331 | .38 | 63,300 | A. |
| September | 1,130 | 703 | 927 | .298 | .33 | 55,200 | A. |
| The year | 4,340 | 612 | 2,270 | .730 | 9.83 | 1,630,000 | |
| **1909-10.** | | | | | | | |
| October | 1,530 | 703 | 1,120 | .360 | .42 | 68,900 | A. |
| November | 2,440 | 1,110 | 1,620 | .521 | .58 | 96,400 | C. |
| December | 2,960 | 2,510 | 2,810 | .904 | 1.04 | 173,000 | C. |
| January | 3,060 | 2,660 | 2,810 | .904 | 1.04 | 173,000 | C. |
| February | 3,140 | 2,740 | 2,820 | .907 | .94 | 157,000 | C. |
| March | 4,930 | 3,140 | 4,180 | 1.34 | 1.54 | 257,000 | C. |
| April | 5,570 | 4,240 | 4,770 | 1.53 | 1.71 | 284,000 | C. |
| May | 4,340 | 2,580 | 3,460 | 1.11 | 1.28 | 213,000 | C. |
| June | 2,660 | 1,740 | 2,200 | .707 | .79 | 131,000 | C. |
| July | 1,800 | 1,180 | 1,400 | .450 | .52 | 86,100 | C. |
| August | 1,150 | 1,010 | 1,070 | .344 | .40 | 65,800 | C. |
| September | 1,090 | 1,010 | 1,030 | .331 | .37 | 61,300 | C. |
| The year | 5,570 | 703 | 2,440 | .785 | 10.63 | 1,770,000 | |
| **1910.** | | | | | | | |
| October | 1,320 | 1,040 | 1,210 | .389 | .45 | 74,400 | C. |
| November | 1,860 | 1,220 | 1,480 | .476 | .53 | 88,100 | C. |
| December | 2,740 | 1,980 | 2,420 | .778 | .90 | 149,000 | C. |

*Discharge measurements of Moore Bros. flume near Klamath Falls, Oreg., in 1910-11.*

| Date. | Discharge. | Date. | Discharge. |
|---|---|---|---|
| 1910. | *Sec.-ft.* | 1911. | *Sec.-ft.* |
| June 9 | 133 | Sept. 25 | 214 |
| 13 | 130 | 26 | 210 |
| | | Nov. 22 | 213 |
| 1911. | | 24 | 200 |
| July 28 | 135 | 27 | 200 |

## LOWER KLAMATH LAKE NEAR BROWNELL, CAL.

Lower Klamath Lake is connected with Klamath River by the Klamath Straits. The Southern Pacific Co. has constructed a railroad through the marshes parallel to Klamath River. The embankment which crosses Klamath Straits is provided with gates whereby the surface flow can be regulated.

A gage was established in Lower Klamath Lake near Brownell, Cal., January 23, 1907. The elevation of the zero of the gage is 4,082.50 feet above sea level, and all gage heights have been referred to this datum. The normal area of the lake is 21,000 acres.

*Daily gage height, in feet, of Lower Klamath Lake near Brownell, Cal., for 1907–1909.*

| Day. | Jan | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1907. | | | | | | | | | |
| 1 | ........ | 3.0 | 3.9 | 4.3 | 4.7 | 4.3 | 3.8 | 2.8 | 2.4 |
| 2 | ........ | 3.0 | 3.9 | 4.4 | 4.7 | 4.3 | 3.8 | 2.7 | 2.4 |
| 3 | ........ | 3.1 | 3.9 | 4.4 | 4.8 | 4.3 | 3.7 | 2.7 | 2.4 |
| 4 | ........ | 3.2 | 3.9 | 4.4 | 4.8 | 4.3 | 3.7 | 2.6 | 2.4 |
| 5 | ........ | 3.2 | 3.9 | 4.4 | 4.7 | 4.3 | 3.6 | 2.6 | 2.4 |
| 6 | ........ | 3.2 | 3.9 | 4.5 | 4.6 | 4.3 | 3.6 | 2.6 | 2.4 |
| 7 | ........ | 3.3 | 4.0 | 4.5 | 4.7 | 4.2 | 3.5 | 2.6 | 2.4 |
| 8 | ........ | 3.3 | 4.0 | 4.5 | 4.6 | 4.2 | 3.5 | 2.6 | 2.4 |
| 9 | ........ | 3.3 | 4.0 | 4.4 | 4.5 | 4.2 | 3.5 | 2.6 | 2.4 |
| 10 | ........ | 3.3 | 4.0 | 4.4 | 4.5 | 4.2 | 3.4 | 2.6 | 2.4 |
| 11 | ........ | 3.3 | 4.0 | 4.4 | 4.6 | 4.2 | 3.4 | 2.6 | 2.3 |
| 12 | ........ | 3.4 | 4.0 | 4.4 | 4.6 | 4.2 | 3.4 | 2.6 | 2.3 |
| 13 | ........ | 3.4 | 4.0 | 4.4 | 4.5 | 4.2 | 3.4 | 2.6 | 2.3 |
| 14 | ........ | 3.4 | 4.0 | 4.5 | 4.5 | 4.2 | 3.4 | 2.6 | 2.3 |
| 15 | ........ | 3.4 | 4.1 | 4.6 | 4.4 | 4.1 | 3.4 | 2.6 | 2.3 |
| 16 | ........ | 3.4 | 4.1 | 4.6 | 4.5 | 4.1 | 3.4 | 2.6 | 2.3 |
| 17 | ........ | 3.5 | 4.1 | 4.6 | 4.5 | 4.1 | 3.4 | 2.6 | 2.3 |
| 18 | ........ | 3.5 | 4.1 | 4.7 | 4.3 | 4.1 | 3.3 | 2.6 | 2.3 |
| 19 | ........ | 3.6 | 4.1 | 4.7 | 4.4 | 4.1 | 3.3 | 2.5 | 2.3 |
| 20 | ........ | 3.7 | 4.1 | 4.7 | 4.4 | 4.1 | 3.2 | 2.5 | 2.3 |
| 21 | ........ | 3.7 | 4.1 | 4.7 | 4.3 | 4.1 | 3.2 | 2.5 | 2.3 |
| 22 | ........ | 3.7 | 4.1 | 4.7 | 4.4 | 4.1 | 3.2 | 2.5 | 2.3 |
| 23 | 2.9 | 3.8 | 4.1 | 4.7 | 4.4 | 4.1 | 3.2 | 2.5 | 2.3 |
| 24 | 2.9 | 3.7 | 4.1 | 4.7 | 4.4 | 4.1 | 3.1 | 2.5 | 2.3 |
| 25 | 2.9 | 3.8 | 4.1 | 4.7 | 4.4 | 4.0 | 3.1 | 2.5 | 2.3 |
| 26 | 2.9 | 3.8 | 4.2 | 4.7 | 4.4 | 4.0 | 3.0 | 2.5 | 2.3 |
| 27 | 2.9 | 3.8 | 4.3 | 4.7 | 4.4 | 3.9 | 3.0 | 2.5 | 2.3 |
| 28 | 2.9 | 3.8 | 4.3 | 4.7 | 4.4 | 3.8 | 3.0 | 2.5 | 2.3 |
| 29 | 2.9 | ........ | 4.3 | 4.7 | 4.4 | 3.8 | 3.0 | 2.5 | 2.3 |
| 30 | 2.9 | ........ | 4.3 | 4.7 | 4.3 | 3.8 | 2.9 | 2.5 | 2.3 |
| 31 | 3.0 | ........ | 4.3 | ........ | 4.3 | ........ | 2.9 | ........ | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907-8. | | | | | | | | | | | | |
| 1 | 2.3 | 2.1 | 2.6 | 2.8 | 3.2 | 3.3 | 3.3 | 3.2 | 3.1 | ........ | 2.1 | 1.7 |
| 2 | 2.3 | 2.1 | 2.6 | 2.8 | 3.2 | 3.3 | 3.3 | 3.2 | 3.1 | ........ | 2.1 | 1.7 |
| 3 | 2.3 | 2.1 | 2.6 | 2.8 | 3.2 | 3.3 | 3.3 | 3.2 | 3.1 | 2.5 | 2.1 | 1.7 |
| 4 | 2.3 | 2.2 | 2.6 | 2.8 | 3.3 | 3.3 | 3.3 | 3.2 | 3.1 | 2.5 | 2.1 | 1.7 |
| 5 | 2.3 | 2.3 | 2.6 | 2.8 | 3.3 | 3.4 | 3.3 | 3.2 | 3.0 | 2.5 | 2.0 | 1.7 |
| 6 | 2.3 | 2.3 | 2.6 | 2.8 | 3.3 | 3.4 | 3.3 | 3.2 | 3.0 | 2.5 | 2.0 | 1.7 |
| 7 | 2.3 | 2.4 | 2.6 | 2.8 | 3.4 | 3.4 | 3.3 | 3.2 | 3.0 | 2.5 | 2.0 | 1.7 |
| 8 | 2.3 | 2.4 | 2.6 | 2.8 | 3.4 | 3.4 | 3.3 | 3.2 | 3.0 | 2.5 | 1.9 | 1.7 |
| 9 | 2.3 | 2.4 | 2.6 | 2.8 | 3.4 | 3.4 | 3.3 | 3.2 | 3.0 | 2.5 | 1.9 | 1.7 |
| 10 | 2.3 | 2.4 | 2.6 | 2.8 | 3.4 | 3.4 | 3.3 | 3.2 | 3.0 | 2.4 | 1.9 | 1.6 |
| 11 | 2.3 | 2.4 | 2.6 | 2.8 | 3.4 | 3.4 | 3.3 | 3.2 | 3.0 | 2.4 | 1.9 | 1.6 |
| 12 | 2.3 | 2.4 | 2.6 | 2.9 | 3.4 | 3.4 | 3.3 | 3.1 | 2.9 | 2.4 | 1.9 | 1.6 |
| 13 | 2.3 | 2.4 | 2.6 | 2.9 | 3.4 | 3.4 | 3.3 | 3.1 | 2.9 | 3.4 | 1.9 | 1.6 |
| 14 | 2.3 | 2.5 | 2.6 | 3.0 | 3.4 | 3.4 | 3.3 | 3.1 | 2.9 | 2.4 | 1.9 | 1.6 |
| 15 | 2.3 | 2.5 | 2.6 | 3.0 | 3.4 | 3.4 | 3.3 | 3.1 | 2.9 | 2.4 | 1.9 | 1.6 |
| 16 | 2.3 | 2.5 | 2.6 | 3.0 | 3.4 | 3.4 | 3.2 | 3.1 | 2.9 | 2.3 | 1.9 | 1.6 |
| 17 | 2.3 | 2.5 | 2.6 | 3.0 | 3.4 | 3.4 | 3.0 | 3.1 | 2.9 | 2.3 | 1.9 | 1.6 |
| 18 | 2.3 | 2.5 | 2.6 | 3.1 | 3.4 | 3.4 | 3.1 | 3.1 | 2.9 | 2.3 | 1.9 | 1.6 |
| 19 | 2.3 | 2.5 | 2.7 | 3.1 | 3.4 | 3.3 | 3.1 | 3.1 | 2.8 | 2.2 | 1.9 | 1.6 |
| 20 | 2.3 | 2.5 | 2.7 | 3.1 | 3.4 | 3.3 | 3.1 | 3.1 | 2.8 | 2.2 | 1.9 | 1.6 |
| 21 | 2.3 | 2.5 | 2.7 | 3.1 | 3.4 | 3.3 | 3.1 | 3.1 | 2.8 | 2.2 | 1.8 | 1.6 |
| 22 | 2.3 | 2.5 | 2.7 | 3.1 | 3.4 | 3.3 | 3.0 | 3.1 | 2.8 | 2.2 | 1.8 | 1.6 |
| 23 | 2.3 | 2.5 | 2.7 | 3.1 | 3.4 | 3.3 | 3.0 | 3.1 | ........ | 2.2 | 1.8 | 1.7 |
| 24 | 2.3 | 2.5 | 2.7 | 3.1 | 3.4 | 3.3 | 3.1 | 3.1 | ........ | 2.2 | 1.8 | 1.7 |
| 25 | 2.3 | 2.5 | 2.7 | 3.1 | 3.4 | 3.3 | 3.2 | 3.1 | ........ | 2.1 | 1.8 | 1.7 |
| 26 | 2.3 | 2.5 | 2.7 | 3.1 | 3.4 | 3.3 | 3.2 | 3.1 | ........ | 2.1 | 1.8 | 1.7 |
| 27 | 2.3 | 2.5 | 2.7 | 3.1 | 3.4 | 3.3 | 3.2 | 3.1 | ........ | 2.1 | 1.8 | 1.7 |
| 28 | 2.2 | 2.5 | 2.7 | 3.1 | 3.3 | 3.3 | 3.2 | 3.1 | ........ | 2.1 | 1.8 | 1.7 |
| 29 | 2.2 | 2.5 | 2.7 | 3.2 | 3.3 | 3.3 | 3.2 | 3.1 | ........ | 2.1 | 1.8 | 1.6 |
| 30 | 2.2 | 2.6 | 2.7 | 3.2 | ........ | 3.3 | 3.2 | 3.1 | ........ | 2.1 | 1.7 | 1.6 |
| 31 | 2.2 | ........ | 2.7 | 3.2 | ........ | 3.3 | ........ | 3.1 | ........ | 2.1 | 1.7 | ........ |

*Daily gage height, in feet, of Lower Klamath Lake near Brownell, Cal., for 1907-1909*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908-9. | | | | | | | | | | | | |
| 1 | 1.6 | 2.1 | 2.4 | 2.5 | 2.9 | 3.5 | 3.7 | 3.6 | 3.3 | 2.8 | ...... | ...... |
| 2 | 1.6 | 2.1 | 2.4 | 2.5 | 2.9 | 3.5 | 3.7 | 3.5 | 3.2 | 2.8 | ...... | ...... |
| 3 | 1.6 | 2.1 | 2.4 | 2.5 | 2.9 | 3.5 | 3.7 | 3.5 | 3.2 | 2.8 | ...... | ...... |
| 4 | 1.7 | 2.2 | 2.4 | 2.5 | 2.9 | 3.5 | 3.7 | 3.5 | 3.2 | 2.7 | ...... | ...... |
| 5 | 1.7 | 2.2 | 2.4 | 2.5 | 2.9 | 3.5 | 3.7 | 3.5 | 3.2 | 2.7 | ...... | ...... |
| 6 | 1.7 | 2.2 | 2.3 | 2.5 | 2.9 | 3.5 | 3.7 | 3.5 | 3.2 | 2.7 | ...... | ...... |
| 7 | 1.7 | 2.2 | 2.2 | 2.5 | 3.0 | 3.6 | 3.7 | 3.5 | 3.2 | 2.7 | ...... | ...... |
| 8 | 1.7 | 2.2 | 2.2 | 2.5 | 3.0 | 3.6 | 3.7 | 3.5 | 3.2 | 2.7 | ...... | ...... |
| 9 | 1.7 | 2.2 | 2.2 | 2.6 | 3.0 | 3.6 | 3.8 | 3.5 | 3.2 | 2.6 | ...... | ...... |
| 10 | 1.7 | 2.2 | 2.2 | 2.6 | 3.0 | 3.6 | 3.8 | 3.5 | 3.2 | 2.6 | ...... | ...... |
| 11 | 1.8 | 2.2 | 2.3 | 2.6 | 3.0 | 3.6 | 3.8 | 3.5 | 3.2 | 2.6 | ...... | ...... |
| 12 | 1.8 | 2.3 | 2.3 | 2.7 | 3.0 | 3.6 | 3.8 | 3.5 | 3.2 | 2.6 | ...... | ...... |
| 13 | 1.9 | 2.3 | 2.4 | 2.7 | 3.0 | 3.6 | 3.8 | 3.5 | 3.1 | 2.5 | ...... | ...... |
| 14 | 1.9 | 2.3 | 2.5 | 2.8 | 3.1 | 3.7 | 3.8 | 3.5 | 3.1 | 2.5 | ...... | ...... |
| 15 | 2.0 | 2.3 | 2.5 | 2.8 | 3.1 | 3.7 | 3.7 | 3.5 | 3.1 | 2.5 | ...... | ...... |
| 16 | 2.0 | 2.3 | 2.5 | 2.8 | 3.2 | 3.7 | 3.7 | 3.4 | 3.1 | ...... | ...... | ...... |
| 17 | 2.0 | 2.3 | 2.5 | 2.8 | 3.3 | 3.7 | 3.6 | 3.4 | 3.1 | ...... | ...... | ...... |
| 18 | 2.1 | 2.3 | 2.5 | 2.8 | 3.3 | 3.7 | 3.6 | 3.4 | 3.1 | ...... | ...... | ...... |
| 19 | 2.1 | 2.2 | 2.5 | 2.8 | 3.3 | 3.7 | 3.7 | 3.4 | 3.0 | ...... | ...... | ...... |
| 20 | 2.1 | 2.2 | 2.5 | 2.9 | 3.3 | 3.7 | 3.7 | 3.4 | 3.0 | ...... | ...... | ...... |
| 21 | 2.1 | 2.2 | 2.5 | 2.9 | 3.4 | 3.7 | 3.7 | 3.4 | 3.0 | ...... | ...... | ...... |
| 22 | 2.1 | 2.2 | 2.5 | 2.8 | 3.4 | 3.7 | 3.6 | 3.4 | 3.0 | ...... | ...... | ...... |
| 23 | 2.1 | 2.2 | 2.5 | 2.8 | 3.5 | 3.7 | 3.6 | 3.4 | 3.0 | ...... | ...... | ...... |
| 24 | 2.1 | 2.2 | 2.5 | 2.8 | 3.5 | 3.7 | 3.6 | 3.4 | 3.0 | ...... | ...... | ...... |
| 25 | 2.1 | 2.3 | 2.5 | 2.8 | 3.5 | 3.7 | 3.6 | 3.4 | 2.9 | ...... | ...... | ...... |
| 26 | 2.1 | 2.4 | 2.5 | 2.8 | 3.5 | 3.7 | 3.6 | 3.4 | 2.9 | ...... | ...... | ...... |
| 27 | 2.1 | 2.4 | 2.5 | 2.8 | 3.5 | 3.7 | 3.6 | 3.4 | 2.9 | ...... | ...... | ...... |
| 28 | 2.1 | 2.4 | 2.5 | 2.8 | 3.5 | 3.7 | 3.6 | 3.4 | 2.9 | ...... | ...... | ...... |
| 29 | 2.1 | 2.4 | 2.5 | 2.8 | ...... | 3.7 | 3.6 | 3.4 | 2.9 | ...... | ...... | ...... |
| 30 | 2.1 | 2.4 | 2.5 | 2.9 | ...... | 3.7 | 3.6 | 3.3 | 2.8 | ...... | ...... | ...... |
| 31 | 2.1 | ...... | 2.5 | 2.9 | ...... | 3.7 | ...... | 3.3 | ...... | ...... | ...... | ...... |

## KLAMATH RIVER BELOW KLAMATH FALLS, OREG.

The lands along Klamath River through the bordering marshes from Klamath Falls to Keno are grown up with tules and other aquatic plants. They will ultimately be drained and large areas of very fertile land thus be made suitable for agriculture. For the purpose of making a general study of the level of the water surface in this territory three gages were established:

Gage No. 1, located 4 miles below Klamath Falls, was established June 20, 1906. The elevation of the zero of the gage is 4,079.86 feet above sea level.

Gage No. 2, at Lee's ranch, 12 miles below Klamath Falls, was established December 19, 1906. The elevation of the zero of the gage is 4,075.04. As this gage is inaccessible during high water, it has not been possible to obtain continuous records.

Gage No. 3, at Teeter's landing, 17 miles below Klamath Falls, was established December 19, 1906. The elevation of the zero of the gage is 4,079.44.

During 1909 only gage No. 1 was read.

*Daily gage height, in feet, of Klamath River 4 miles below Klamath Falls, Oreg., for 1907–1909.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1907 | | | | | | | | | |
| 1 | 5.8 | | 6.8 | 7.35 | 7.5 | 7.0 | 6.4 | 5.55 | |
| 2 | 5.8 | | 6.8 | 7.4 | | | | | [illegible] |
| 3 | 5.8 | | | 7.4 | 7.4 | 7.0 | 6.4 | 5.5 | |
| 4 | 5.8 | | 9.0 | | | | | | [illegible] |
| 5 | | | 9.0 | 7.5 | 7.5 | | 6.3 | 5.45 | |
| 6 | | | 9.0 | 7.5 | | 7.0 | | | [illegible] |
| 7 | 5.8 | | 9.0 | | 7.5 | | 6.25 | 5.4 | |
| 8 | 5.8 | | 9.0 | 7.5 | | 6.9 | 6.25 | | |
| 9 | 5.8 | | 9.9 | 7.5 | | | 6.2 | | [illegible] |
| 10 | 5.8 | | | 7.5 | | | | 5.35 | |
| 11 | | | 7.0 | | 7.4 | 6.9 | 6.2 | | [illegible] |
| 12 | | 6.2 | | 7.5 | | | | 5.35 | |
| 13 | | 6.3 | | | 7.35 | 6.85 | | 5.35 | |
| 14 | 5.8 | 6.3 | | 7.55 | 7.4 | | | | [illegible] |
| 15 | 5.8 | 6.3 | | | 7.4 | 6.8 | 6.0 | | |
| 16 | 5.8 | 6.3 | | | 7.35 | | | 5.3 | [illegible] |
| 17 | 5.8 | 6.2 | | | 7.3 | | 5.95 | 5.25 | |
| 18 | 5.8 | 6.7 | | 7.55 | 7.3 | | 5.95 | | 5.1 |
| 19 | 5.8 | 6.7 | | | | 6.8 | | 5.25 | |
| 20 | 5.8 | 6.7 | | 7.55 | 7.25 | | 5.9 | | [illegible] |
| 21 | 5.8 | 6.7 | | | 7.2 | | | | 5.1 |
| 22 | 5.8 | 6.8 | | 7.6 | 7.2 | 6.65 | 5.8 | 5.15 | |
| 23 | 5.8 | 6.8 | | | | | 5.8 | | |
| 24 | 5.8 | | | 7.5 | 7.2 | 6.6 | | 5.25 | 5.1 |
| 25 | 5.8 | [illegible] | | | 7.15 | | 5.75 | | |
| 26 | 5.8 | 6.8 | | 7.5 | | 6.55 | 5.7 | | |
| 27 | 5.8 | | 7.2 | | | | 5.7 | 5.2 | [illegible] |
| 28 | | 6.8 | 7.3 | | 7.1 | | | | |
| 29 | | | 7.3 | 7.5 | 7.1 | 6.5 | 5.65 | | [illegible] |
| 30 | | | 7.3 | | 7.1 | | 5.65 | 5.2 | |
| 31 | | | 7.35 | | | | 5.6 | 5.2 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | | | | | 6.2 | 6.15 | | | 5.85 | 5.3 | 4.75 | |
| 2 | | 5.2 | | 5.9 | | | 6.15 | 6.1 | | | | [illegible] |
| 3 | 5.1 | | 5.4 | | 6.3 | 6.15 | | | 5.8 | 5.2 | 4.7 | |
| 4 | | 5.2 | | 5.9 | | | 6.15 | 6.0 | | | | |
| 5 | 5.1 | | | | 6.25 | 6.15 | | | | | 4.7 | [illegible] |
| 6 | | | 5.5 | 5.95 | | | 6.15 | | 5.7 | | | |
| 7 | 5.1 | 5.25 | | | | 6.15 | | 6.0 | | 5.2 | | [illegible] |
| 8 | | | | | 6.4 | | 6.15 | 6.0 | 5.75 | | 4.65 | |
| 9 | 5.1 | 5.25 | 5.4 | 6.0 | | 6.15 | | | | 5.1 | | |
| 10 | | | | | 6.15 | | | 5.95 | | | 4.65 | [illegible] |
| 11 | 5.1 | 5.3 | | 5.95 | 6.2 | 6.15 | 6.15 | | 5.7 | 5.1 | | |
| 12 | 5.1 | | 5.5 | | | | | 6.0 | | | | [illegible] |
| 13 | | | | 6.0 | | | | | 5.7 | 5.1 | 4.65 | |
| 14 | 5.1 | 5.25 | 5.55 | | 6.2 | 6.1 | 6.1 | | | | | [illegible] |
| 15 | | | | 6.0 | 6.2 | | | 6.0 | 5.7 | 5.0 | 4.65 | |
| 16 | | 5.3 | 5.55 | | | 6.15 | | | | | 4.65 | |
| 17 | 5.1 | | | | 6.2 | | 6.2 | | 5.6 | | | [illegible] |
| 18 | | 5.25 | | 6.05 | | 6.1 | 6.1 | 5.95 | | 5.0 | | |
| 19 | 5.1 | | | | 6.15 | | | | | | 4.6 | [illegible] |
| 20 | | 5.3 | 5.55 | 6.05 | 6.15 | | | 5.95 | 5.9 | 5.0 | | |
| 21 | 5.1 | | | | | 6.1 | 6.2 | | | | | |
| 22 | | | | | 6.15 | | | | 5.4 | | 4.55 | [illegible] |
| 23 | | 5.3 | 5.6 | 6.15 | | 6.1 | 6.15 | 5.9 | | 4.95 | | |
| 24 | 5.15 | | | | | | | | 5.55 | | 4.55 | [illegible] |
| 25 | | 5.35 | | 6.1 | 6.15 | | 6.1 | 5.85 | | | | |
| 26 | 5.15 | | 5.95 | | | 6.1 | | | | | 4.5 | [illegible] |
| 27 | | 5.35 | | 6.15 | 6.15 | | 6.0 | | 5.4 | 4.85 | | |
| 28 | 5.2 | | 5.8 | | | 6.1 | | 5.9 | 5.35 | | | |
| 29 | | | | | | | | | | 4.8 | 4.45 | |
| 30 | | 5.35 | 5.95 | 6.15 | | | 6.15 | 5.85 | | | | |
| 31 | 5.15 | | | | | 6.1 | | | | | 4.45 | |

*Daily gage height, in feet, of Klamath River 4 miles below Klamath Falls, Oreg., for 1907–1909*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | | | | |
| 1 | 4.4 | | | | 6.2 | | 6.5 | 6.4 | | | | |
| 2 | | | | 5.35 | | 6.5 | | | 6.05 | | | |
| 3 | 4.4 | 5.1 | 5.25 | | | | 6.5 | 6.35 | | | | |
| 4 | | | | 5.35 | | 6.6 | | | | | | |
| 5 | | | 5.3 | | 6.15 | | 6.45 | 6.3 | 5.95 | | | |
| 6 | | 5.1 | | 5.55 | | 6.4 | | | | | | |
| 7 | 4.5 | | | | | | 6.45 | | 5.85 | | | |
| 8 | | | | | 6.15 | | | 6.3 | | | | |
| 9 | | | 5.3 | 5.55 | | 6.45 | | | | | | |
| 10 | 4.6 | 5.1 | | | 6.15 | | 6.4 | | 5.9 | | | |
| 11 | | | | | | 6.5 | | 6.2 | | | | |
| 12 | 4.65 | | 5.25 | 5.55 | | | | | 5.85 | | | |
| 13 | | | | | 6.3 | 6.5 | 6.45 | | | | | |
| 14 | | 5.15 | | | | | | | | | | |
| 15 | | | 5.3 | 5.7 | 6.2 | 6.55 | 6.5 | 6.2 | 5.8 | | | |
| 16 | 4.9 | | | | | | | | | | | |
| 17 | | 5.2 | | | | | 6.4 | 6.2 | 5.85 | | | |
| 18 | | | 5.4 | | 6.4 | 6.55 | | | | | | |
| 19 | | | | 5.95 | | | 6.35 | 6.15 | 5.8 | | | |
| 20 | 5.0 | | | 5.8 | 6.4 | | | | | | | |
| 21 | | 5.2 | 5.4 | | | | 6.4 | | 5.7 | | | |
| 22 | | | | | 6.3 | 6.55 | | 6.2 | | | | |
| 23 | 5.0 | 5.25 | | 5.85 | | | | | 5.75 | | | |
| 24 | | | 5.35 | | 6.5 | | 6.4 | 6.15 | | | | |
| 25 | | | | | | | | | | | | |
| 26 | 5.0 | 5.2 | 5.35 | 5.95 | | 6.55 | 6.4 | | 5.6 | | | |
| 27 | 5.05 | | | | 6.45 | | | 6.15 | | | | |
| 28 | | 5.25 | | 6.0 | | | | | 5.65 | | | |
| 29 | | | | 6.0 | | | 6.3 | 6.1 | | | | |
| 30 | | | 5.4 | | | 6.55 | | | | | | |
| 31 | | | | | | | | 6.05 | | | | |

*Daily gage height, in feet, of Klamath River 12 miles below Klamath Falls, Oreg., for 1907–8.*

| Day. | Jan. | Feb. | Mar. | Apr. | Day. | Jan. | Feb. | Mar. | Apr. |
|---|---|---|---|---|---|---|---|---|---|
| 1907. | | | | | 1907. | | | | |
| 1 | 10.5 | 10.8 | 11.7 | 12.1 | 16 | 10.7 | 11.5 | 11.8 | |
| 2 | 10.6 | 10.9 | 11.7 | 12.1 | 17 | 10.7 | 11.5 | 11.9 | |
| 3 | 10.7 | 11.0 | 11.7 | 12.2 | 18 | 10.7 | 11.5 | 12.1 | |
| 4 | 10.8 | 11.0 | 11.7 | 12.2 | 19 | 10.7 | 11.5 | 12.1 | |
| 5 | 10.7 | 11.1 | 11.7 | 12.2 | 20 | 10.7 | 11.5 | 12.0 | |
| 6 | 10.7 | 11.1 | 11.7 | 12.2 | 21 | 10.7 | 11.5 | 12.1 | |
| 7 | 10.7 | 11.2 | 11.7 | | 22 | 10.7 | 11.6 | 12.0 | |
| 8 | 10.7 | 11.2 | 11.8 | | 23 | 10.7 | 11.6 | 12.1 | |
| 9 | 10.7 | 11.2 | 11.8 | | 24 | 10.7 | 11.7 | 12.1 | |
| 10 | 10.7 | 11.3 | 11.8 | | 25 | 10.7 | 11.7 | 12.1 | |
| 11 | 10.7 | 11.4 | 11.9 | | 26 | 10.7 | 11.7 | 12.1 | |
| 12 | 10.7 | 11.4 | 11.8 | | 27 | 10.7 | 11.7 | 12.1 | |
| 13 | 10.7 | 11.4 | 11.8 | | 28 | 10.8 | 11.7 | 12.1 | |
| 14 | 10.7 | 11.4 | 11.8 | | 29 | 10.8 | | 12.1 | |
| 15 | 10.7 | 11.4 | 11.8 | | 30 | 10.8 | | 12.1 | |
| | | | | | 31 | 10.8 | | 12.1 | |

*Daily gage height, in feet, of Klamath River 12 miles below Klamath Falls, Oreg., for 1907–8—Continued.*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 10.0 | 10.1 | 10.3 | 10.7 | 11.2 | 11.1 | 11.2 | ...... | ...... | ...... | [illegible] | |
| 2 | 10.0 | 10.1 | 10.3 | 10.7 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | |
| 3 | 10.0 | 10.1 | 10.3 | 10.8 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | |
| 4 | 10.0 | 10.1 | 10.3 | 10.8 | 11.2 | 11.2 | 11.2 | ...... | ...... | 10.5 | ...... | |
| 5 | 10.0 | 10.1 | 10.3 | 10.9 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | |
| 6 | 10.0 | 10.1 | 10.3 | 10.9 | 11.2 | 11.2 | 11.2 | ...... | 10.6 | ...... | ...... | |
| 7 | 10.0 | 10.1 | 10.3 | 10.9 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | |
| 8 | 10.0 | 10.1 | 10.3 | 10.9 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | [illegible] | |
| 9 | 10.0 | 10.2 | 10.3 | 10.9 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | |
| 10 | 10.0 | 10.2 | 10.3 | 11.0 | 11.2 | 11.2 | 11.2 | ...... | ...... | [illegible] | ...... | |
| 11 | 10.0 | 10.2 | 10.3 | 11.0 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | |
| 12 | 10.0 | 10.2 | 10.3 | 11.0 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | |
| 13 | 10.0 | 10.2 | 10.3 | 11.0 | 11.2 | 11.2 | 11.2 | ...... | 10.25 | ...... | ...... | |
| 14 | 10.0 | 10.2 | 10.3 | 11.0 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | |
| 15 | 10.0 | 10.2 | 10.3 | 11.0 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | [illegible] | |
| 16 | 10.0 | 10.2 | 10.3 | 11.0 | 11.2 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | |
| 17 | 10.0 | 10.2 | 10.3 | 11.1 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | ...... | |
| 18 | 10.0 | 10.2 | 10.3 | 11.1 | 11.2 | 11.2 | ...... | ...... | ...... | [illegible] | ...... | |
| 19 | 10.0 | 10.2 | 10.3 | 11.1 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | ...... | |
| 20 | 10.0 | 10.2 | 10.3 | 11.1 | 11.2 | 11.2 | ...... | ...... | 10.4 | ...... | ...... | |
| 21 | 10.0 | 10.2 | 10.3 | 11.1 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | ...... | |
| 22 | 10.0 | 10.2 | 10.4 | 11.1 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | [illegible] | |
| 23 | 10.0 | 10.2 | 10.4 | 11.1 | 11.1 | 11.2 | ...... | ...... | ...... | ...... | ...... | |
| 24 | 10.0 | 10.2 | 10.5 | 11.1 | 11.1 | 11.2 | ...... | 10.8 | ...... | ...... | ...... | |
| 25 | 10.1 | 10.3 | 10.5 | 11.1 | 11.1 | 11.2 | ...... | ...... | ...... | [illegible] | ...... | |
| 26 | 10.1 | 10.3 | 10.5 | 11.1 | 11.1 | 11.2 | ...... | ...... | ...... | ...... | ...... | |
| 27 | 10.1 | 10.3 | 10.5 | 11.1 | 11.1 | 11.2 | ...... | ...... | 10.3 | ...... | ...... | |
| 28 | 10.1 | 10.3 | 10.5 | 11.1 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | ...... | |
| 29 | 10.1 | 10.3 | 10.5 | 11.1 | 11.2 | 11.2 | ...... | ...... | ...... | ...... | ...... | |
| 30 | 10.1 | 10.3 | 10.5 | 11.2 | ...... | 11.2 | ...... | 10.7 | ...... | ...... | [illegible] | |
| 31 | 10.1 | ...... | 10.5 | 11.2 | ...... | 11.2 | ...... | ...... | ...... | ...... | ...... | |

*Daily gage height, in feet, of Klamath River 17 miles below Klamath Falls, Oreg., 1907–8.*

| Day | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|---|
| 1907. | | | | | | | | |
| 1 | 6.07 | 6.20 | 7.10 | 7.60 | 7.80 | 7.40 | 6.80 | [illegible] |
| 2 | 6.10 | 6.25 | 7.10 | 7.60 | 7.80 | 7.40 | 6.75 | 5.80 |
| 3 | 6.12 | 6.30 | 7.12 | 7.63 | 7.75 | 7.35 | 6.73 | 5.80 |
| 4 | 6.27 | 6.35 | 7.12 | 7.80 | 7.75 | 7.33 | 6.70 | 5.80 |
| 5 | 6.30 | 6.47 | 7.15 | 7.75 | 7.80 | 7.30 | 6.68 | 5.80 |
| 6 | 6.35 | 6.50 | 7.17 | 7.65 | 7.75 | 7.32 | 6.65 | [illegible] |
| 7 | 6.35 | 6.55 | 7.20 | 7.65 | 7.75 | ........ | 6.60 | 5.70 |
| 8 | 6.32 | 6.60 | 7.20 | 7.70 | 7.75 | 7.25 | 6.60 | [illegible] |
| 9 | 6.30 | 6.65 | 7.25 | 7.70 | 7.80 | 7.20 | 6.60 | [illegible] |
| 10 | 6.35 | 6.70 | 7.25 | 7.70 | 7.90 | 7.30 | 6.56 | 5.80 |
| 11 | 6.35 | 6.72 | 7.25 | 7.70 | 7.75 | 7.25 | 6.52 | 5.80 |
| 12 | 6.35 | 6.77 | 7.22 | 7.75 | 7.65 | 7.22 | 6.50 | 5.73 |
| 13 | [illegible] | 6.80 | 7.22 | 7.80 | 7.70 | ........ | ........ | [illegible] |
| 14 | 6.35 | 6.80 | 7.22 | 7.80 | 7.70 | ........ | 6.45 | [illegible] |
| 15 | 6.35 | 6.85 | 7.27 | 7.80 | 7.70 | ........ | 6.40 | 5.72 |
| 16 | 6.27 | 6.90 | 7.25 | 7.80 | 7.65 | 7.22 | 6.37 | 5.70 |
| 17 | 6.27 | 6.90 | 7.30 | 7.75 | 7.65 | 7.22 | 6.35 | ...... |
| 18 | 6.27 | 6.90 | 7.30 | 7.80 | 7.60 | 7.22 | 6.32 | [illegible] |
| 19 | 6.30 | 6.92 | 7.35 | 7.80 | 7.60 | 7.19 | 6.30 | [illegible] |
| 20 | 6.30 | 6.95 | 7.45 | 7.90 | 7.60 | 7.19 | 6.30 | 5.65 |
| 21 | 6.30 | 6.97 | 7.42 | 7.80 | 7.45 | ........ | 6.23 | 5.62 |
| 22 | 6.30 | 7.00 | 7.47 | 7.80 | 7.70 | ........ | 6.20 | 5.60 |
| 23 | 6.30 | 7.00 | 7.35 | 7.80 | 7.50 | 7.00 | 6.20 | [illegible] |
| 24 | 6.30 | 7.05 | [illegible] | 7.80 | 7.50 | 7.00 | 6.17 | 5.70 |
| 25 | 6.30 | 7.00 | 7.30 | 7.85 | 7.50 | 6.97 | 6.15 | 5.65 |
| 26 | 6.30 | 7.05 | 7.30 | 7.85 | 7.50 | 6.96 | 6.10 | [illegible] |
| 27 | [illegible] | 7.05 | 7.30 | 7.85 | 7.40 | 6.94 | 6.10 | 5.60 |
| 28 | 6.35 | [illegible] | 7.30 | 7.90 | 7.40 | 6.94 | 6.10 | [illegible] |
| 29 | 6.35 | ...... | 7.35 | 7.80 | 7.40 | 6.97 | 6.10 | [illegible] |
| 30 | 6.35 | ...... | 7.60 | 7.80 | 7.40 | 6.90 | 6.10 | [illegible] |
| 31 | 6.30 | ...... | 7.40 | ........ | 7.40 | ........ | 6.08 | 5.60 |

*Daily gage height, in feet, of Klamath River 17 miles below Klamath Falls, Oreg., for 1907–8*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 1 | 5.48 | ...... | 5.80 | 6.20 | ...... | 6.51 | 6.50 | ...... | ...... | 5.75 | ...... | 4.95 |
| 2 | 5.50 | 5.60 | 5.80 | 6.20 | 6.58 | ...... | 6.50 | ...... | ...... | 5.74 | ...... | 4.95 |
| 3 | 5.50 | 5.60 | 5.85 | 6.20 | 6.59 | 6.53 | 6.50 | ...... | ...... | 5.72 | ...... | 4.92 |
| 4 | 5.50 | 5.60 | 5.85 | 6.20 | 6.60 | 6.52 | 6.50 | 6.41 | ...... | 5.70 | ...... | 4.96 |
| 5 | 5.50 | 5.60 | 5.85 | 6.22 | ...... | 6.52 | ...... | 6.41 | 6.14 | 5.70 | ...... | 4.95 |
| 6 | 5.50 | 5.60 | 5.85 | 6.30 | ...... | 6.52 | ...... | ...... | 6.12 | 5.69 | ...... | 4.96 |
| 7 | 5.50 | 5.60 | 5.80 | 6.31 | 6.55 | 6.52 | ...... | ...... | 6.10 | 5.68 | ...... | 4.90 |
| 8 | 5.50 | 5.65 | 5.80 | ...... | ...... | 6.52 | 6.50 | ...... | 6.18 | 5.67 | ...... | 4.88 |
| 9 | 5.53 | 5.67 | 5.80 | ...... | 6.55 | 6.51 | 6.50 | ...... | 6.10 | 5.64 | ...... | 4.85 |
| 10 | 5.50 | 5.70 | 5.80 | 6.31 | 6.55 | 6.51 | 6.51 | ...... | 6.10 | 5.62 | ...... | 4.85 |
| 11 | 5.50 | 5.70 | 5.80 | 6.32 | ...... | 6.51 | 6.51 | ...... | 6.09 | 5.59 | ...... | 4.87 |
| 12 | 5.50 | 5.70 | 5.90 | 6.32 | ...... | 6.50 | 6.51 | ...... | 6.08 | ...... | ...... | 4.88 |
| 13 | 5.50 | ...... | 5.90 | 6.32 | 6.57 | 6.50 | 6.51 | 6.42 | 6.06 | ...... | ...... | 4.89 |
| 14 | 5.53 | 5.70 | 5.90 | ...... | 6.58 | 6.50 | 6.51 | 6.42 | 6.02 | ...... | ...... | 4.85 |
| 15 | 5.53 | 5.70 | 5.90 | 6.37 | 6.58 | 6.49 | 6.51 | ...... | 6.00 | ...... | 5.15 | 4.85 |
| 16 | 5.53 | 5.70 | 5.90 | 6.37 | 6.52 | 6.49 | 6.51 | 6.41 | ...... | ...... | 5.10 | 4.86 |
| 17 | 5.53 | ...... | 5.90 | 6.40 | 6.52 | ...... | 6.51 | ...... | ...... | ...... | 5.10 | 4.88 |
| 18 | 5.53 | 5.70 | 5.90 | 6.40 | 6.53 | ...... | 6.51 | 6.41 | ...... | ...... | 5.10 | 4.89 |
| 19 | 5.53 | 5.72 | 6.00 | 6.46 | ...... | 6.49 | 6.52 | 6.41 | 5.98 | ...... | 5.10 | 4.89 |
| 20 | 5.53 | 5.72 | 5.90 | 6.46 | 6.53 | 6.49 | 6.52 | ...... | 5.90 | ...... | 5.05 | 4.90 |
| 21 | 5.53 | 5.72 | 5.90 | 6.47 | 6.55 | 6.50 | 6.53 | ...... | ...... | ...... | 5.05 | 4.92 |
| 22 | 5.53 | 5.75 | 5.90 | 6.47 | 6.55 | 6.49 | ...... | 6.40 | 5.90 | ...... | 5.05 | 4.95 |
| 23 | 5.55 | 5.75 | 6.00 | 6.48 | 6.55 | 6.49 | ...... | ...... | 5.90 | ...... | 5.05 | 4.96 |
| 24 | 5.55 | 5.75 | 6.00 | 6.50 | 6.53 | ...... | ...... | ...... | 5.90 | ...... | 5.00 | 4.95 |
| 25 | 5.55 | 5.75 | 6.00 | 6.50 | 6.53 | ...... | 6.47 | ...... | 5.90 | ...... | 4.96 | 4.95 |
| 26 | 5.57 | 5.75 | 6.20 | 6.50 | 6.52 | ...... | 6.45 | ...... | ...... | ...... | 5.00 | 4.92 |
| 27 | 5.57 | 5.75 | 6.15 | 6.50 | ...... | ...... | ...... | 6.40 | 5.80 | ...... | 4.80 | 4.95 |
| 28 | 5.59 | 5.75 | 6.20 | 6.50 | ...... | 6.47 | ...... | 6.40 | 5.78 | ...... | 4.85 | 4.95 |
| 29 | 5.60 | 5.75 | 6.22 | ...... | ...... | ...... | 6.44 | ...... | 5.76 | ...... | 4.90 | 4.96 |
| 30 | 5.60 | 5.80 | 6.20 | ...... | ...... | ...... | ...... | ...... | 5.76 | ...... | 4.95 | 4.98 |
| 31 | 5.60 | ...... | 6.20 | ...... | ...... | 6.50 | ...... | ...... | ...... | ...... | 4.95 | ...... |

| Day. | Oct. | Nov. | Day. | Oct. | Nov. | Day. | Oct. | Nov. |
|---|---|---|---|---|---|---|---|---|
| 1908. | | | 1908. | | | 1908. | | |
| 1 | 4.98 | ...... | 11 | 5.06 | ...... | 21 | 5.48 | ...... |
| 2 | 5.05 | ...... | 12 | 5.10 | ...... | 22 | 5.46 | ...... |
| 3 | 5.08 | ...... | 13 | 5.35 | ...... | 23 | 5.48 | ...... |
| 4 | 4.98 | ...... | 14 | 5.36 | ...... | 24 | 5.50 | ...... |
| 5 | 5.00 | ...... | 15 | 5.38 | ...... | 25 | 5.50 | ...... |
| 6 | 5.00 | 5.54 | 16 | 5.39 | ...... | 26 | 5.50 | ...... |
| 7 | 5.01 | 5.55 | 17 | 5.40 | ...... | 27 | 5.50 | ...... |
| 8 | 5.05 | 5.55 | 18 | 5.41 | ...... | 28 | 5.50 | ...... |
| 9 | 5.02 | ...... | 19 | 5.45 | ...... | 29 | 5.50 | ...... |
| 10 | 5.06 | ...... | 20 | 5.50 | ...... | 30 | 5.50 | ...... |
| | | | | | | 31 | 5.50 | ...... |

## KLAMATH RIVER AT KENO, OREG.

This station, which is located at the county bridge at Keno, in sec. 31, T. 39 S., R. 8 E., at the lower end of the lakes and marshes that form the headwaters of Klamath River, was established May 31, 1904. The United States Reclamation Service is reclaiming lands for irrigation in two ways—by diverting waters from Klamath Lake and by draining the large swamp areas bordering this stream and the lakes which are tributary to it. Immediately below the station the river breaks over a rocky ledge with a fall of about 200 feet to the mile.

During the winter the river usually freezes over, but as the water is comparatively deep and the ice is not very thick the accuracy of records has not been greatly affected by the ice. At low stages a growth of aquatic plants clogs the section and to some extent lessens the accuracy of the results. An additional source of error has resulted from the effect of wind on the wide expanse of water above the station. A strong upstream wind will blow the water back from the outlet and diminish the flow, but as the gage is located at the bridge, 1,000 feet above the measuring section, gage heights are not always affected to a corresponding degree. The datum of the gage has not been changed since it was installed.

Discharge measurements are made from a cable 1,000 feet below the gage.

This station was not visited in 1910 or 1911, but conditions seem to be fairly permanent, and the 1909 discharge rating curve is believed to give reasonably close results for 1910. No discharge determined for 1911. The station was maintained during 1910 and 1911 by the United States Reclamation Service, but the daily and monthly discharge tables for 1910 were computed by the United States Geological Survey.

*Discharge measurements of Klamath River at Keno, Oreg., in 1904–1909.*

| Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* |
| 1904. | | | |
| May 31 | Lewis and Landis | 15.15 | 8,321 |
| June 5 | ....do | 15.05 | 8,230 |
| 18 | T. H. Humphreys | 14.65 | 7,205 |
| Aug. 12 | ....do | 13.00 | 2,571 |
| Sept. 17 | ....do | 12.40 | 1,791 |
| 28 | C. T. Darley | 12.40 | 1,721 |
| Oct. 19 | ....do | 12.50 | 1,900 |
| Nov. 3 | ....do | 12.60 | 1,938 |
| 26 | ....do | 12.65 | 2,161 |
| 1905. | | | |
| Jan. 10 | C. T. Darley | 13.00 | 2,590 |
| 23 | ....do | 13.30 | 2,930 |
| 30 | ....do | 13.20 | 2,875 |
| Feb. 9 | ....do | 13.25 | 2,975 |
| 18 | ....do | 13.30 | 3,192 |
| Mar. 3 | ....do | 13.30 | 3,145 |
| 31 | ....do | 13.32 | 3,159 |
| Apr. 13 | ....do | 13.28 | 3,015 |
| May 17 | ....do | 13.03 | 2,676 |
| June 19 | ....do | 12.68 | 2,102 |
| July 14 | ....do | 12.20 | 1,445 |
| Aug. 14 | ....do | 11.80 | 1,146 |
| 31 | ....do | 11.75 | 924 |
| Nov. 3 | ....do | 12.00 | 680 |
| Dec. 3 | ....do | 12.28 | 851 |
| 1906. | | | |
| May 8 | L. F. Hendricks | 13.7 | 3,600 |
| June 30 | ....do | 13.4 | 3,330 |
| July 23 | ....do | 12.9 | 2,540 |
| Sept. 5 | ....do | 12.05 | 1,170 |
| 1907. | | | |
| Feb. 19 | L. F. Hendricks | 13.55 | 3,240 |
| Mar. 13 | ....do | 13.80 | 3,760 |
| Apr. 2 | L. F. Hendricks | 14.10 | 4,550 |
| 16 | ....do | 14.25 | 4,880 |
| May 23 | J. C. Stevens | 14.06 | 4,430 |
| June 1 | C. E. Ellsworth | 13.90 | 4,230 |
| 15 | ....do | 13.65 | 3,650 |
| 29 | ....do | 13.45 | 3,160 |
| July 22 | ....do | 12.90 | 2,240 |
| 29 | ....do | 12.75 | 1,970 |
| Aug. 19 | ....do | 12.40 | 1,540 |
| Sept. 2 | ....do | 12.30 | 1,450 |
| 21 | ....do | 12.20 | 1,340 |
| Oct. 3 | ....do | 12.25 | 1,350 |
| 25 | ....do | 12.30 | 1,460 |
| Nov. 4 | ....do | 12.37 | 1,470 |
| 14 | ....do | 12.40 | 1,530 |
| 1908. | | | |
| Feb. 18 | C. E. Ellsworth | 13.20 | 2,[illegible] |
| Mar. 6 | ....do | 13.17 | 2,580 |
| Apr. 1 | ....do | 13.15 | 2,530 |
| 17 | ....do | 13.19 | 2,[illegible] |
| May 5 | Ellsworth and Kimble | 13.02 | 2,4[illegible] |
| 22 | H. Kimble | 12.90 | 2,[illegible] |
| June 12 | ....do | 12.80 | 2,[illegible] |
| July 14 | ....do | 12.25 | 1,4[illegible] |
| Sept. 1 | ....do | 11.70 | [illegible] |
| 17 | ....do | 11.60 | [illegible] |
| Oct. 1 | ....do | 11.55 | 1,[illegible] |
| 27 | ....do | 12.20 | 1,5[illegible] |
| Nov. 29 | Kimble and McGlashan | 12.38 | 1,4[illegible] |
| 1909. | | | |
| Apr. 30 | Howard Kimble | 13.38 | 2,[illegible] |
| June 2 | A. E. Gerger | 13.09 | 2,[illegible] |
| 29 | ....do | 12.76 | 1,[illegible] |
| Sept. 14 | John Yadon | 11.57 | [illegible] |

*Daily gage height, in feet, of Klamath River at Keno, Oreg., for 1904–1912.*

| Day. | May. | June. | July. | Aug. | Sept. | Day. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | | | 1904. | | | | | |
| 1 | ........ | 15.1 | 14.2 | 13.3 | 12.7 | 16 | ........ | 14.8 | 13.8 | 13.0 | 12.4 |
| 2 | ........ | 15.1 | 14.1 | 13.3 | 12.6 | 17 | ........ | 14.7 | 13.8 | 12.9 | 12.4 |
| 3 | ........ | 15.1 | 14.1 | 13.3 | 12.6 | 18 | ........ | 14.7 | 13.8 | 12.9 | 12.4 |
| 4 | ........ | 15.5 | 14.1 | 13.2 | 12.6 | 19 | ........ | 14.6 | 13.7 | 12.9 | 12.4 |
| 5 | ........ | 15.0 | 14.05 | 13.2 | 12.6 | 20 | ........ | 14.6 | 13.7 | 12.9 | 12.4 |
| 6 | ........ | 15.0 | 14.0 | 13.2 | 12.6 | 21 | ........ | 14.6 | 13.7 | 12.9 | 12.4 |
| 7 | ........ | 15.0 | 14.0 | 13.1 | 12.5 | 22 | ........ | 14.6 | 13.6 | 12.8 | 12.4 |
| 8 | ........ | 14.9 | 14.0 | 13.1 | 12.5 | 23 | ........ | 14.5 | 13.6 | 12.8 | 12.4 |
| 9 | ........ | 14.9 | 14.0 | 13.1 | 12.5 | 24 | ........ | 14.5 | 13.6 | 12.8 | 12.4 |
| 10 | ........ | 14.9 | 13.9 | 13.0 | 12.5 | 25 | ........ | 14.4 | 13.5 | 12.8 | 12.4 |
| 11 | ........ | 14.9 | 13.9 | 13.0 | 12.5 | 26 | ........ | 14.4 | 13.5 | 12.8 | 12.4 |
| 12 | ........ | 14.9 | 13.9 | 13.0 | 12.4 | 27 | ........ | 14.4 | 13.5 | 12.7 | 12.4 |
| 13 | ........ | 14.8 | 13.8 | 13.0 | 12.4 | 28 | ........ | 14.3 | 13.4 | 12.7 | 12.4 |
| 14 | ........ | 14.8 | 13.8 | 13.0 | 12.4 | 29 | ........ | 14.3 | 13.4 | 12.7 | 12.4 |
| 15 | ........ | 14.8 | 13.8 | 13.0 | 12.4 | 30 | ........ | 14.2 | 13.4 | 12.7 | 12.4 |
| | | | | | | 31 | 15.1 | ........ | 13.4 | 12.7 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | | | | |
| 1 | 12.4 | 12.6 | 12.7 | 12.9 | 13.2 | 13.3 | 13.4 | 13.2 | 13.0 | 12.5 | 11.9 | 11.8 |
| 2 | 12.4 | 12.6 | 12.7 | 12.9 | 13.2 | 13.3 | 13.4 | 13.2 | 13.0 | 12.4 | 11.9 | 11.8 |
| 3 | 12.4 | 12.6 | 12.7 | 13.0 | 13.3 | 13.3 | 13.4 | 13.2 | 13.0 | 12.4 | 11.9 | 11.8 |
| 4 | 12.4 | 12.6 | 12.7 | 13.0 | 13.3 | 13.3 | 13.4 | 13.2 | 13.0 | 12.4 | 11.9 | 11.8 |
| 5 | 12.4 | 12.6 | 12.7 | 13.0 | 13.3 | 13.3 | 13.4 | 13.2 | 13.0 | 12.4 | 11.9 | 11.8 |
| 6 | 12.4 | 12.6 | 12.7 | 13.0 | 13.3 | 13.3 | 13.4 | 13.2 | 12.9 | 12.3 | 11.8 | 11.8 |
| 7 | 12.4 | 12.6 | 12.7 | 13.0 | 13.3 | 13.3 | 13.4 | 13.2 | 12.9 | 12.3 | 11.8 | 11.8 |
| 8 | 12.4 | 12.6 | 12.7 | 13.1 | 13.3 | 13.3 | 13.4 | 13.1 | 12.9 | 12.2 | 11.8 | 11.8 |
| 9 | 12.5 | 12.6 | 12.7 | 13.1 | 13.3 | 13.3 | 13.4 | 13.1 | 12.9 | 12.2 | 11.8 | 11.8 |
| 10 | 12.5 | 12.6 | 12.8 | 13.1 | 13.3 | 13.3 | 13.4 | 13.1 | 12.9 | 12.2 | 11.8 | 11.8 |
| 11 | 12.5 | 12.6 | 12.8 | 13.1 | 13.3 | 13.3 | 13.4 | 13.1 | 12.9 | 12.2 | 11.8 | 11.8 |
| 12 | 12.4 | 12.6 | 12.8 | 13.1 | 13.3 | 13.3 | 13.3 | 13.1 | 12.8 | 12.2 | 11.8 | 11.8 |
| 13 | 12.4 | 12.6 | 12.8 | 13.1 | 13.3 | 13.2 | 13.3 | 13.1 | 12.8 | 12.2 | 11.8 | 11.8 |
| 14 | 12.4 | 12.6 | 12.8 | 13.1 | 13.3 | 13.2 | 13.3 | 13.1 | 12.8 | 12.2 | 11.8 | 11.8 |
| 15 | 12.4 | 12.6 | 12.8 | 13.1 | 13.3 | 13.2 | 13.3 | 13.1 | 12.7 | 12.2 | 11.8 | 11.8 |
| 16 | 12.4 | 12.6 | 12.8 | 13.1 | 13.3 | 13.2 | 13.3 | 13.1 | 12.7 | 12.2 | 11.8 | 11.8 |
| 17 | 12.5 | 12.6 | 12.8 | 13.1 | 13.3 | 13.2 | 13.3 | 13.0 | 12.7 | 12.2 | 11.8 | 11.8 |
| 18 | 12.5 | 12.6 | 12.8 | 13.1 | 13.3 | 13.2 | 13.3 | 13.0 | 12.7 | 12.2 | 11.8 | 11.8 |
| 19 | 12.5 | 12.6 | 12.8 | 13.1 | 13.3 | 13.2 | 13.2 | 13.0 | 12.6 | 12.1 | 11.8 | 11.8 |
| 20 | 12.5 | 12.6 | 12.8 | 13.1 | 13.3 | 13.2 | 13.2 | 13.0 | 12.6 | 12.1 | 11.8 | 11.8 |
| 21 | 12.5 | 12.7 | 12.8 | 13.1 | 13.3 | 13.2 | 13.2 | 13.0 | 12.6 | 12.1 | 11.8 | 11.8 |
| 22 | 12.5 | 12.7 | 12.8 | 13.1 | 13.3 | 13.2 | 13.2 | 13.0 | 12.5 | 12.1 | 11.8 | 11.8 |
| 23 | 12.5 | 12.7 | 12.8 | 13.3 | 13.3 | 13.2 | 13.2 | 13.0 | 12.5 | 12.1 | 11.8 | 11.8 |
| 24 | 12.5 | 12.7 | 12.8 | 13.1 | 13.3 | 13.2 | 13.2 | 13.0 | 12.5 | 12.1 | 11.8 | 11.8 |
| 25 | 12.5 | 12.7 | ....... | 13.1 | 13.3 | 13.3 | 13.2 | 13.0 | 12.5 | 12.0 | 11.8 | 11.8 |
| 26 | 12.5 | 12.7 | ....... | 13.1 | 13.3 | 13.3 | 13.2 | 13.0 | 12.5 | 12.0 | 11.8 | 11.8 |
| 27 | 12.5 | 12.7 | ....... | 13.1 | 13.3 | 13.3 | 13.2 | 13.0 | 12.5 | 12.0 | 11.8 | 11.8 |
| 28 | 12.5 | 12.7 | ....... | 13.2 | 13.3 | 13.4 | 13.2 | 13.0 | 12.5 | 12.0 | 11.8 | 11.8 |
| 29 | 12.5 | 12.7 | ....... | 13.2 | ....... | 13.4 | 13.2 | 13.0 | 12.5 | 12.0 | 11.8 | 11.9 |
| 30 | 12.5 | 12.7 | ....... | 13.2 | ....... | 13.4 | 13.2 | 13.0 | 12.5 | 12.0 | 11.8 | 11.9 |
| 31 | 12.5 | ....... | ....... | 13.2 | ....... | 13.4 | ....... | 13.0 | ....... | 11.9 | 11.8 | ...... |
| 1905–6. | | | | | | | | | | | | |
| 1 | 11.9 | 12.1 | 12.3 | 12.5 | 12.8 | 12.8 | 13.1 | 13.6 | 13.7 | 13.4 | 12.6 | 12.1 |
| 2 | 11.9 | 12.1 | 12.3 | 12.5 | 12.8 | 12.9 | 13.1 | 13.6 | 13.7 | 13.4 | 12.6 | 12.1 |
| 3 | 11.9 | 12.1 | 12.3 | 12.5 | 12.8 | 12.9 | 13.1 | 13.6 | 13.7 | 13.4 | 12.6 | 12.1 |
| 4 | 11.9 | 12.1 | 12.3 | 12.5 | 12.8 | 12.8 | 13.1 | 13.7 | 13.7 | 13.3 | 12.6 | 12.1 |
| 5 | 11.9 | 12.1 | 12.3 | 12.5 | 12.8 | 12.8 | 13.1 | 13.7 | 13.7 | 13.3 | 12.6 | 12.1 |
| 6 | 11.9 | 12.1 | 12.3 | 12.5 | 12.8 | 12.8 | 13.2 | 13.7 | 13.7 | 13.3 | 12.6 | 12.1 |
| 7 | 11.9 | 12.1 | 12.3 | 12.5 | 12.8 | 12.8 | 13.2 | 13.7 | 13.7 | 13.3 | 12.5 | 12.1 |
| 8 | 11.9 | 12.1 | 12.4 | 12.5 | 12.7 | 12.8 | 13.2 | 13.7 | 13.7 | 13.3 | 12.5 | 12.1 |
| 9 | 11.9 | 12.1 | 12.4 | 12.5 | 12.7 | 12.8 | 13.2 | 13.7 | 13.7 | 13.3 | 12.5 | 12.1 |
| 10 | 11.9 | 12.1 | 12.4 | 12.5 | 12.7 | 12.8 | 13.2 | 13.7 | 13.7 | 13.2 | 12.5 | 12.1 |
| 11 | 11.9 | 12.1 | 12.4 | 12.4 | 12.7 | 12.8 | 13.3 | 13.7 | 13.7 | 13.2 | 12.5 | 12.1 |
| 12 | 11.9 | 12.1 | 12.4 | 12.5 | 12.7 | 12.8 | 13.3 | 13.7 | 13.6 | 13.2 | 12.5 | 12.0 |
| 13 | 11.9 | 12.1 | 12.4 | 12.6 | 12.7 | 12.8 | 13.3 | 13.7 | 13.6 | 13.2 | 12.5 | 12.0 |
| 14 | 11.9 | 12.1 | 12.4 | 12.7 | 12.7 | 12.8 | 13.3 | 13.7 | 13.6 | 13.2 | 12.4 | 12.0 |
| 15 | 11.9 | 12.1 | 12.4 | 12.6 | 12.7 | 12.9 | 13.3 | 13.7 | 13.6 | 13.2 | 12.4 | 12.0 |

*Daily gage height, in feet, of Klamath River at Keno, Oreg., for 1904–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1905–6.** | | | | | | | | | | | | |
| 16 | 11.9 | 12.2 | 12.4 | 12.7 | 12.7 | 12.9 | 13.4 | 13.7 | 13.6 | 13.2 | 12.4 | 12.0 |
| 17 | 12.0 | 12.2 | 12.4 | 12.7 | 12.7 | 12.9 | 13.4 | 13.7 | 13.6 | 13.1 | 12.3 | 12.0 |
| 18 | 12.0 | 12.2 | 12.4 | 12.7 | 12.7 | 12.9 | 13.4 | 13.7 | 13.6 | 13.1 | 12.3 | 12.0 |
| 19 | 12.0 | 12.2 | 12.4 | 12.8 | 12.7 | 12.9 | 13.5 | 13.7 | 13.6 | 13.1 | 12.3 | 12.0 |
| 20 | 12.0 | 12.2 | 12.4 | 12.8 | 12.7 | 12.9 | 13.5 | 13.7 | 13.5 | 13.1 | 12.3 | 12.0 |
| 21 | 12.0 | 12.3 | 12.4 | 12.8 | 12.7 | 12.9 | 13.5 | 13.7 | 13.5 | 13.1 | 12.3 | 12.0 |
| 22 | 12.0 | 12.3 | 12.4 | 12.8 | 12.8 | 12.9 | 13.5 | 13.7 | 13.5 | 13.0 | 12.2 | 12.0 |
| 23 | 12.0 | 12.3 | 12.4 | 12.8 | 12.8 | 12.9 | 13.5 | 13.7 | 13.5 | 12.9 | 12.2 | 12.0 |
| 24 | 12.0 | 12.3 | 12.4 | 12.8 | 12.8 | 12.9 | 13.5 | 13.7 | 13.5 | 12.9 | 12.2 | 12.0 |
| 25 | 12.0 | 12.3 | 12.4 | 12.8 | 12.8 | 13.0 | 13.5 | 13.7 | 13.5 | 12.8 | 12.2 | 12.0 |
| 26 | 12.0 | 12.3 | 12.4 | 12.8 | 12.8 | 13.0 | 13.5 | 13.7 | 13.5 | 12.8 | 12.2 | 12.0 |
| 27 | 12.0 | 12.3 | 12.5 | 12.8 | 12.8 | 13.0 | 13.6 | 13.7 | 13.5 | 12.8 | 12.2 | 12.0 |
| 28 | 12.1 | 12.3 | 12.5 | 12.8 | 12.8 | 13.0 | 13.6 | 13.7 | 13.4 | 12.8 | 12.2 | 12.0 |
| 29 | 12.1 | 12.3 | 12.5 | 12.8 | ...... | 13.0 | 13.6 | 13.7 | 13.4 | 12.7 | 12.2 | 12.0 |
| 30 | 12.1 | 12.3 | 12.5 | 12.8 | ...... | 13.0 | 13.6 | 13.7 | 13.4 | 12.7 | 12.2 | 12.0 |
| 31 | 12.1 | ...... | 12.5 | 12.8 | ...... | 13.0 | ...... | 13.7 | ...... | 12.7 | 12.1 | ...... |
| **1906–7.** | | | | | | | | | | | | |
| 1 | 12.0 | 12.2 | 12.4 | 12.70 | 12.90 | 13.70 | 14.10 | 14.30 | 13.92 | 13.40 | 12.65 | 12.35 |
| 2 | 12.0 | 12.2 | 12.4 | 12.70 | 13.00 | 13.70 | 14.10 | 14.30 | 13.90 | 13.37 | 12.60 | 12.30 |
| 3 | 12.0 | 12.2 | 12.5 | 12.70 | 13.10 | 13.70 | 14.10 | 14.30 | 13.88 | 13.35 | 12.55 | 12.30 |
| 4 | 12.0 | 12.2 | 12.5 | 12.70 | 13.10 | 13.70 | 14.30 | 14.30 | 13.86 | 13.32 | 12.54 | 12.30 |
| 5 | 12.0 | 12.2 | 12.5 | 12.70 | 13.20 | 13.80 | 14.20 | 14.30 | 13.84 | 13.30 | 12.52 | 12.27 |
| 6 | 12.0 | 12.2 | 12.5 | 12.70 | 13.20 | 13.80 | 14.20 | 14.30 | 13.81 | 13.25 | 12.50 | 12.25 |
| 7 | 12.0 | 12.2 | 12.5 | 12.70 | 13.30 | 13.80 | 14.20 | 14.30 | 13.80 | 13.23 | 12.49 | 12.25 |
| 8 | 12.0 | 12.2 | 12.5 | 12.70 | 13.30 | 13.80 | 14.20 | 14.30 | 13.79 | 13.21 | 12.48 | 12.25 |
| 9 | 12.0 | 12.2 | 12.5 | 12.80 | 13.40 | 13.80 | 14.30 | 14.30 | 13.77 | 13.20 | 12.47 | 12.25 |
| 10 | 12.0 | 12.2 | 12.5 | 12.80 | 13.40 | 13.80 | 14.30 | 14.20 | 13.75 | 13.18 | 12.47 | 12.25 |
| 11 | 12.0 | 12.2 | 12.5 | 12.80 | 13.40 | 13.80 | 14.30 | 14.20 | 13.73 | 13.16 | 12.45 | 12.25 |
| 12 | 12.0 | 12.3 | 12.5 | 12.80 | 13.40 | 13.80 | 14.30 | 14.10 | 13.73 | 13.15 | 12.45 | 12.24 |
| 13 | 12.0 | 12.3 | 12.5 | 12.80 | 13.40 | 13.80 | 14.30 | 14.20 | 13.73 | 13.13 | 12.43 | 12.24 |
| 14 | 12.0 | 12.3 | 12.5 | 12.80 | 13.50 | 13.80 | 14.30 | 14.20 | 13.71 | 13.10 | 12.42 | 12.25 |
| 15 | 12.0 | 12.3 | 12.5 | 12.80 | 13.50 | 13.80 | 14.20 | 14.20 | 13.69 | 13.05 | 12.41 | 12.23 |
| 16 | 12.0 | 12.3 | 12.5 | 12.80 | 13.50 | 13.80 | 14.30 | 14.20 | 13.66 | 13.02 | 12.40 | 12.23 |
| 17 | 12.0 | 12.3 | 12.6 | 12.80 | 13.50 | 13.90 | 14.30 | 14.20 | 13.64 | 13.00 | 12.40 | 12.23 |
| 18 | 12.0 | 12.3 | 12.6 | 12.80 | 13.50 | 14.10 | 14.30 | 14.20 | 13.62 | 12.98 | 12.39 | 12.22 |
| 19 | 12.0 | 12.4 | 12.6 | 12.80 | 13.50 | 14.00 | 14.40 | 14.10 | 13.60 | 12.95 | 12.39 | 12.22 |
| 20 | 12.1 | 12.4 | 12.6 | 12.80 | 13.60 | 14.00 | 14.40 | 14.10 | 13.58 | 12.92 | 12.37 | 12.22 |
| 21 | 12.1 | 12.4 | 12.6 | 12.80 | 13.60 | 14.00 | 14.30 | 14.10 | 13.56 | 12.91 | 12.35 | 12.20 |
| 22 | 12.1 | 12.4 | 12.7 | 12.80 | 13.60 | 14.00 | 14.30 | 14.10 | 13.55 | 12.90 | 12.33 | 12.20 |
| 23 | 12.1 | 12.4 | 12.6 | 12.80 | 13.60 | 14.00 | 14.30 | 14.00 | 13.54 | 12.87 | 12.30 | 12.20 |
| 24 | 12.1 | 12.4 | 12.6 | 12.80 | 13.60 | 14.00 | 14.30 | 14.00 | 13.53 | 12.85 | 12.30 | 12.20 |
| 25 | 12.1 | 12.4 | 12.6 | 12.80 | 13.70 | 14.00 | 14.30 | 13.98 | 13.53 | 12.82 | 12.31 | 12.17 |
| 26 | 12.1 | 12.4 | 12.6 | 12.80 | 13.70 | 14.00 | 14.30 | 13.96 | 13.51 | 12.80 | 12.31 | 12.15 |
| 27 | 12.1 | 12.4 | 12.6 | 12.80 | 13.70 | 14.00 | 14.30 | 13.95 | 13.50 | 12.78 | 12.31 | 12.15 |
| 28 | 12.1 | 12.4 | 12.6 | 12.90 | 13.70 | 14.00 | 14.30 | 13.94 | 13.47 | 12.76 | 12.31 | 12.15 |
| 29 | 12.1 | 12.4 | 12.6 | 12.90 | ...... | 14.10 | 14.30 | 13.93 | 13.45 | 12.75 | 12.32 | 12.17 |
| 30 | 12.1 | 12.4 | 12.7 | 12.90 | ...... | 14.10 | 14.30 | 13.93 | 13.42 | 12.72 | 12.32 | 12.20 |
| 31 | 12.2 | ...... | 12.7 | 12.90 | ...... | 14.10 | ...... | 13.93 | ...... | 12.70 | 12.34 | ...... |
| **1907–8.** | | | | | | | | | | | | |
| 1 | 12.22 | 12.40 | 12.50 | 12.90 | 13.10 | 13.20 | 13.15 | 13.00 | 12.80 | 12.50 | 11.97 | 11.66 |
| 2 | 12.25 | 12.33 | 12.50 | 12.92 | 13.10 | 13.17 | 13.15 | 13.00 | 12.75 | 12.50 | 11.95 | 11.66 |
| 3 | 12.21 | 12.44 | 12.50 | 12.95 | 13.10 | 13.19 | 13.13 | 13.00 | 12.75 | 12.45 | 12.00 | 11.64 |
| 4 | 12.20 | 12.37 | 12.50 | 12.95 | 13.15 | 13.19 | 13.15 | 13.00 | 12.80 | 12.42 | 12.00 | 11.65 |
| 5 | 12.20 | 12.38 | 12.50 | 12.97 | 13.17 | 13.19 | 13.15 | 13.00 | 12.80 | 12.40 | 12.00 | 11.65 |
| 6 | 12.20 | 12.39 | 12.52 | 12.99 | 13.27 | 13.19 | 13.16 | 13.00 | 12.80 | 12.39 | 12.00 | 11.63 |
| 7 | 12.22 | 12.39 | 12.38 | 13.00 | 13.22 | 13.19 | 13.17 | 13.00 | 12.80 | 12.40 | 12.00 | 11.61 |
| 8 | 12.23 | 12.39 | 12.50 | 13.00 | 13.30 | 13.19 | 13.19 | 13.00 | 12.80 | 12.36 | 12.00 | 11.55 |
| 9 | 12.23 | 12.39 | 12.50 | 13.00 | 13.27 | 13.19 | 13.19 | 12.99 | 12.79 | 12.32 | 11.95 | 11.58 |
| 10 | 12.25 | 12.40 | 12.50 | 13.00 | 13.20 | 13.19 | 13.19 | 12.99 | 12.79 | 12.30 | 11.90 | 11.60 |
| 11 | 12.25 | 12.40 | 12.50 | 13.00 | 13.20 | 13.19 | 13.19 | 12.99 | 12.80 | 12.30 | 11.85 | 11.60 |
| 12 | 12.25 | 12.40 | 12.60 | 13.00 | 13.19 | 13.19 | 13.19 | 12.99 | 12.79 | 12.25 | 11.80 | 11.60 |
| 13 | 12.25 | 12.40 | 12.60 | 13.00 | 13.20 | 13.19 | 13.19 | 12.99 | 12.79 | 12.20 | 11.80 | 11.60 |
| 14 | 12.25 | 12.40 | 12.60 | 13.00 | 13.20 | 13.17 | 13.19 | 12.98 | 12.75 | 12.20 | 11.82 | 11.58 |
| 15 | 12.25 | 12.40 | 12.60 | 13.02 | 13.20 | 13.17 | 13.19 | 12.97 | 12.70 | 12.15 | 11.82 | 11.59 |
| 16 | 12.25 | 12.40 | 12.60 | 13.04 | 13.20 | 13.15 | 13.19 | 13.00 | 12.65 | 12.15 | 11.82 | 11.60 |
| 17 | 12.25 | 12.40 | 12.63 | 13.08 | 13.20 | 13.00 | 13.20 | 13.01 | 12.63 | 12.15 | 11.82 | 11.60 |
| 18 | 12.25 | 12.40 | 12.63 | 13.09 | 13.20 | 13.17 | 13.15 | 12.95 | 12.61 | 12.15 | 11.80 | 11.64 |
| 19 | 12.30 | 12.40 | 12.64 | 13.09 | 13.19 | 13.17 | 13.17 | 12.96 | 12.59 | 12.15 | 11.80 | 11.60 |
| 20 | 12.30 | 12.42 | 12.65 | 13.10 | 13.20 | 13.15 | 13.20 | 12.99 | 12.60 | 12.13 | 11.79 | 11.62 |

*Daily gage height, in feet, of Klamath River at Keno, Oreg., for 1904–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907–8. | | | | | | | | | | | | |
| 21 | 12.30 | 12.43 | 12.65 | 13.10 | 13.20 | 13.15 | 13.20 | 12.95 | 12.59 | 12.11 | 11.75 | 11.65 |
| 22 | 12.30 | 12.46 | 12.66 | 13.13 | 13.20 | 13.15 | 13.10 | 12.96 | 12.59 | 12.10 | 11.71 | 11.65 |
| 23 | 12.30 | 12.48 | 12.69 | 13.15 | 13.20 | 13.10 | 13.19 | 12.97 | 12.59 | 12.09 | 11.71 | 11.66 |
| 24 | 12.30 | 12.48 | 12.73 | 13.17 | 13.20 | 13.90 | 13.10 | 12.95 | 12.59 | 12.06 | 11.71 | 11.67 |
| 25 | 12.30 | 12.49 | 12.78 | 13.17 | 13.17 | 13.50 | 13.10 | 12.95 | 12.57 | 12.00 | 11.71 | 11.68 |
| 26 | 12.30 | 12.49 | 12.90 | 13.16 | 13.15 | 13.50 | 13.10 | 12.85 | 12.45 | 12.02 | 11.71 | 11.69 |
| 27 | 12.30 | 12.49 | 12.90 | 13.15 | 13.15 | 13.70 | 13.10 | 12.90 | 12.50 | 12.04 | 11.60 | 11.70 |
| 28 | 12.36 | 12.49 | 12.89 | 13.15 | 13.17 | 13.10 | 13.10 | 12.90 | 12.50 | 12.05 | 11.62 | 11.70 |
| 29 | 12.37 | 12.50 | 12.90 | 13.15 | 13.20 | 13.10 | 13.09 | 12.90 | 12.50 | 12.04 | 11.64 | 11.69 |
| 30 | 12.30 | 12.50 | 12.90 | 13.15 | ....... | 13.00 | 13.09 | 12.80 | 12.45 | 12.20 | 11.66 | 11.68 |
| 31 | 12.30 | ....... | 12.90 | 13.15 | ....... | 13.10 | ....... | 12.80 | ....... | 12.00 | 11.68 | ...... |
| 1908–9. | | | | | | | | | | | | |
| 1 | 11.55 | 12.22 | 12.41 | 12.50 | 13.14 | 13.50 | 13.50 | 13.39 | 13.12 | 12.65 | 12.14 | 11.84 |
| 2 | 11.50 | 12.23 | 12.41 | 12.49 | 13.15 | 13.50 | 13.50 | 13.39 | 13.11 | 12.64 | 12.12 | 11.87 |
| 3 | 11.63 | 12.25 | 12.41 | 12.48 | 13.10 | 13.50 | 13.50 | 13.38 | 13.50 | 12.60 | 12.12 | 11.88 |
| 4 | 11.65 | 12.30 | 12.45 | 12.50 | 13.15 | 13.50 | 13.50 | 13.38 | 13.60 | 12.60 | 12.10 | 11.87 |
| 5 | 11.70 | 12.28 | 12.46 | 12.59 | 13.18 | 13.50 | 13.50 | 13.34 | 13.50 | 12.59 | ....... | 11.88 |
| 6 | 11.75 | 12.28 | 12.47 | 12.59 | 13.18 | 13.50 | 13.50 | 13.35 | 13.50 | 12.58 | ....... | 11.89 |
| 7 | 11.75 | 12.29 | 12.47 | 12.62 | 13.19 | 13.50 | 13.50 | 13.32 | 13.10 | 12.58 | ....... | 11.89 |
| 8 | 11.75 | 12.30 | 12.46 | 12.68 | 13.20 | 13.50 | 13.50 | 13.31 | 13.10 | 12.57 | ....... | 11.87 |
| 9 | 11.70 | 12.30 | 12.45 | 12.68 | 13.20 | 13.50 | 13.50 | 13.32 | 13.20 | 12.49 | ....... | 11.87 |
| 10 | 11.80 | 12.30 | 12.45 | 12.68 | 13.20 | 13.50 | 13.45 | 13.18 | 13.10 | 12.46 | ....... | 11.89 |
| 11 | 11.80 | 12.30 | 12.44 | 12.68 | 13.20 | 13.50 | 13.45 | 13.21 | 13.10 | 12.44 | 11.99 | 11.87 |
| 12 | 11.82 | 12.30 | 12.43 | 12.68 | 13.28 | 13.50 | 13.45 | 13.26 | 13.20 | 12.44 | 11.97 | 11.86 |
| 13 | 11.80 | 12.30 | 12.43 | 12.69 | 13.28 | 13.50 | 13.45 | 13.21 | 13.10 | 12.42 | 11.95 | 11.85 |
| 14 | 12.20 | 12.31 | 12.44 | 12.70 | 13.28 | 13.50 | 13.45 | 13.23 | 12.97 | 12.40 | 11.94 | 11.86 |
| 15 | 12.10 | 12.31 | 12.45 | 12.72 | 13.28 | 13.50 | 13.45 | 13.21 | 12.95 | 12.38 | 11.93 | 11.87 |
| 16 | 12.05 | 12.35 | 12.46 | 12.80 | 13.28 | 13.50 | 13.45 | 13.22 | 12.95 | 12.37 | 11.92 | 11.87 |
| 17 | 12.10 | 12.36 | 12.47 | 12.81 | 13.30 | 13.50 | 13.45 | 13.20 | 12.95 | 12.36 | 11.91 | 11.82 |
| 18 | 12.15 | 12.40 | 12.48 | 12.80 | 13.38 | 13.50 | 13.40 | 13.21 | 12.95 | 12.36 | 11.91 | 11.83 |
| 19 | 12.00 | 12.40 | 12.49 | 12.85 | 13.40 | 13.50 | 13.40 | 13.22 | 12.90 | 12.35 | 11.89 | 11.82 |
| 20 | 12.10 | 12.30 | 12.49 | 12.92 | 13.40 | 13.50 | 13.40 | 13.18 | 12.90 | 12.32 | 11.82 | 11.75 |
| 21 | 12.15 | 12.39 | 12.49 | 12.92 | 13.40 | 13.50 | 13.40 | 13.20 | 12.91 | 12.30 | 11.88 | 11.85 |
| 22 | 12.15 | 12.35 | 12.49 | 12.91 | 13.40 | 13.50 | 13.40 | 13.20 | 12.86 | 12.28 | 11.78 | 11.86 |
| 23 | 12.20 | 12.33 | 12.49 | 12.95 | 13.40 | 13.50 | 13.40 | 13.22 | 12.85 | 12.26 | 11.85 | 11.85 |
| 24 | 12.20 | 12.32 | 12.49 | 13.10 | 13.40 | 13.50 | 13.40 | 13.18 | 12.86 | 12.24 | 11.87 | 11.90 |
| 25 | 12.20 | 12.33 | 12.49 | 13.00 | 13.40 | 13.50 | 13.40 | 13.20 | 12.84 | 12.20 | 11.86 | 11.88 |
| 26 | 12.20 | 12.35 | 12.49 | 13.03 | 13.40 | 13.50 | 13.40 | 13.21 | 12.81 | 12.18 | 11.86 | 11.87 |
| 27 | 12.25 | 12.40 | 12.49 | 13.05 | 13.40 | 13.50 | 13.40 | 13.10 | 12.81 | 12.15 | 11.87 | 11.87 |
| 28 | 12.30 | 12.40 | 12.50 | 13.07 | 13.50 | 13.50 | 13.40 | 13.18 | 12.80 | 12.16 | 11.85 | 11.88 |
| 29 | 12.25 | 12.40 | 12.50 | 13.08 | ....... | 13.50 | 13.40 | 13.15 | 12.80 | 12.17 | 11.88 | 11.87 |
| 30 | 12.20 | 12.41 | 12.50 | 13.11 | ....... | 13 50 | 13.38 | 13.12 | 12.78 | 12.20 | 11.83 | 11.84 |
| 31 | 12.20 | ....... | 12.50 | 13.12 | ....... | 13.50 | ....... | 13.18 | ....... | 12.15 | 11.80 | ...... |
| 1909–10. | | | | | | | | | | | | |
| 1 | 11.93 | 12.08 | 12.85 | 13.2 | 13.25 | 13.5 | 13.9 | 13.8 | 13.05 | 12.4 | 11.95 | 11.75 |
| 2 | 11.84 | 12.07 | 12.85 | 13.2 | 13.25 | 13.5 | 13.9 | 13.8 | 13.1 | 12.35 | 11.95 | 11.7 |
| 3 | 11.86 | 12.10 | 12.85 | 13.2 | 13.25 | 13.5 | 13.9 | 13.8 | 13.1 | 12.4 | 11.85 | 11.6 |
| 4 | 11.86 | 12.16 | 12.85 | 13.2 | 13.25 | 13.55 | 13.9 | 13.8 | 13.1 | 12.4 | 11.95 | 11.75 |
| 5 | 11.87 | 12.15 | 12.90 | 13.25 | 13.3 | 13.55 | 13.9 | 13.8 | 13.0 | 12.4 | 11.9 | 11.75 |
| 6 | 11.89 | 12.17 | 12.90 | 13.25 | 13.3 | 13.55 | 13.95 | 13.75 | 13.0 | 12.4 | 11.9 | 11.7 |
| 7 | 11.90 | 12.14 | 12.90 | 13.25 | 13.3 | 13.6 | 13.95 | 13.75 | 13.0 | 12.4 | 11.9 | 11.75 |
| 8 | 11.91 | 12.16 | 12.90 | 13.3 | 13.3 | 13.6 | 13.95 | 13.75 | 13.0 | 12.35 | 11.9 | 11.7 |
| 9 | 11.98 | 12.15 | 12.90 | 13.3 | 13.3 | 13.65 | 13.95 | 13.7 | 12.95 | 12.35 | 11.85 | 11.65 |
| 10 | 11.96 | 12.18 | 12.90 | 13.3 | 13.3 | 13.65 | 13.9 | 13.7 | 12.95 | 12.35 | 11.85 | 11.65 |
| 11 | 11.98 | 12.20 | 12.90 | 13.3 | 13.3 | 13.65 | 13.95 | 13.65 | 12.9 | 12.35 | 11.85 | 11.75 |
| 12 | 11.95 | 12.25 | 12.95 | 13.3 | 13.3 | 13.65 | 13.9 | 13.6 | 12.9 | 12.3 | 11.8 | 11.75 |
| 13 | 11.95 | 12.28 | 12.97 | 13.3 | 13.3 | 13.65 | 13.95 | 13.55 | 12.9 | 12.3 | 11.8 | 11.7 |
| 14 | 11.97 | 12.30 | 12.70 | 13.2 | 13.3 | 13.7 | 13.9 | 13.55 | 12.85 | 12.25 | 11.8 | 11.7 |
| 15 | 11.96 | 12.30 | 12.95 | 13.2 | 13.3 | 13.7 | 13.95 | 13.5 | 12.85 | 12.25 | 11.8 | 11.75 |
| 16 | 11.98 | 12.38 | 12.98 | 13.2 | 13.3 | 13.7 | 13.96 | 13.45 | 12.8 | 12.25 | 11.8 | 11.65 |
| 17 | 12.00 | 12.36 | 12.98 | 13.2 | 13.3 | 13.75 | 13.95 | 13.4 | 12.75 | 12.15 | 11.85 | 11.65 |
| 18 | 12.05 | 12.39 | 13.00 | 13.2 | 13.3 | 13.8 | 13.95 | 13.4 | 12.75 | 12.15 | 11.85 | 11.75 |
| 19 | 11.90 | 12.45 | 13.10 | 13.2 | 13.3 | 13.8 | 13.95 | 13.35 | 12.75 | 12.15 | 11.8 | 11.85 |
| 20 | 12.00 | 12.48 | 13.00 | 13.2 | 13.3 | 13.8 | 13.96 | 13.35 | 12.65 | 12.15 | 11.7 | 11.8 |
| 21 | 12.01 | 12.55 | 13.10 | 13.2 | 13.3 | 13.8 | 13.95 | 13.35 | 12.65 | 12.05 | 11.75 | 11.8 |
| 22 | 12.02 | 12.55 | 13.10 | 13.2 | 13.35 | 13.85 | 13.95 | 13.35 | 12.6 | 12.15 | 11.75 | 11.85 |
| 23 | 12.00 | 12.55 | 13.10 | 13.2 | 13.35 | 13.85 | 13.95 | 13.35 | 12.6 | 12.1 | 11.75 | 11.85 |
| 24 | 12.01 | 12.60 | 13.10 | 13.2 | 13.35 | 13.9 | 13.9 | 13.3 | 12.6 | 12.1 | 11.75 | 11.85 |
| 25 | 12.02 | 12.68 | 13.50 | 13.2 | 13.4 | 13.9 | 13.9 | 13.25 | 12.6 | 12.1 | 11.75 | 11.85 |

*Daily gage height, in feet, of Klamath River at Keno, Oreg., for 1904–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 26 | 12.00 | 12.70 | 13.50 | 13.2 | 13.4 | 13.9 | 13.85 | 13.2 | 12.55 | 12.05 | 11.7 | [illegible] |
| 27 | 12.01 | 12.75 | 13.50 | 13.2 | 13.4 | 13.9 | 13.85 | 13.15 | 12.4 | 12.05 | 11.75 | [illegible] |
| 28 | 12.03 | 12.75 | 13.20 | 13.2 | 13.4 | 13.9 | 13.8 | 13.15 | 12.5 | 12.05 | 11.65 | [illegible] |
| 29 | 12.05 | 12.80 | 13.20 | 13.2 | ...... | 13.9 | 13.8 | 13.1 | 12.5 | 12.0 | 11.7 | [illegible] |
| 30 | 12.00 | 12.80 | 13.20 | 13.2 | ...... | ..... | 13.8 | 13.15 | 12.45 | 12.0 | 11.75 | [illegible] |
| 31 | 12.00 | ..... | 13.20 | 13.25 | ...... | ..... | ...... | 13.15 | ...... | 12.0 | 11.65 | . |
| 1910–11. | | | | | | | | | | | | |
| 1 | 11.65 | 12.15 | 12.55 | 13.0 | 13.2 | 12.9 | 13.0 | 13.5 | 13.6 | 13.1 | 12.35 | [illegible] |
| 2 | 11.85 | 12.1 | 12.6 | 13.0 | 13.2 | 12.9 | 13.0 | 13.5 | 13.6 | 13.0 | 12.35 | [illegible] |
| 3 | 11.75 | 12.1 | 12.6 | 13.0 | 13.1 | 13.0 | 12.9 | 13.5 | 13.6 | 13.0 | 12.35 | [illegible] |
| 4 | 11.9 | 12.1 | 12.65 | 13.0 | 13.0 | 13.0 | 13.0 | 13.7 | 13.6 | 13.0 | 12.3 | [illegible] |
| 5 | 11.9 | 12.1 | 12.65 | 13.0 | 13.0 | 13.0 | 13.0 | 13.6 | 13.5 | 13.0 | 12.3 | [illegible] |
| 6 | 11.9 | 12.1 | 12.7 | 13.0 | 13.0 | 13.0 | 13.1 | 13.7 | 13.5 | 12.9 | 12.25 | [illegible] |
| 7 | 11.9 | 12.1 | 12.7 | 13.0 | 13.0 | 13.0 | 13.2 | 13.6 | 13.5 | 12.9 | 12.2 | [illegible] |
| 8 | 11.9 | 12.15 | 12.7 | 13.0 | 13.0 | 13.0 | 13.2 | 13.6 | 13.5 | 12.9 | 12.2 | [illegible] |
| 9 | 12.0 | 12.15 | 12.75 | 13.0 | 13.0 | 13.0 | 13.2 | 13.6 | 13.5 | 12.9 | 12.25 | [illegible] |
| 10 | 11.9 | 12.25 | 12.8 | 13.0 | 13.1 | 13.0 | 13.2 | 13.6 | 13.4 | 12.8 | 12.2 | [illegible] |
| 11 | 12.0 | 12.1 | 12.8 | 13.0 | 13.1 | 13.0 | 13.3 | 13.6 | 13.4 | 12.8 | 12.2 | [illegible] |
| 12 | 12.1 | 12.1 | 12.8 | 13.0 | 13.1 | 13.0 | 13.3 | 13.5 | 13.4 | 12.8 | 12.2 | [illegible] |
| 13 | 12.0 | 12.15 | 12.85 | 13.0 | 13.0 | 13.0 | 13.4 | 13.6 | 13.4 | 12.8 | 12.15 | [illegible] |
| 14 | 12.0 | 12.15 | 12.85 | 13.0 | 13.0 | 13.0 | 13.4 | 13.7 | 13.4 | 12.8 | 12.2 | [illegible] |
| 15 | 12.0 | 12.15 | 12.85 | 13.0 | 13.0 | 13.0 | 13.4 | 13.6 | 13.4 | 12.8 | 12.1 | [illegible] |
| 16 | 12.0 | 12.15 | 12.85 | 13.0 | 13.0 | 13.0 | 13.4 | 13.6 | 13.3 | 12.8 | 12.1 | [illegible] |
| 17 | 12.05 | 12.15 | 12.95 | 13.1 | 13.0 | 13.0 | 13.4 | 13.6 | 13.2 | 12.8 | 12.1 | [illegible] |
| 18 | 12.05 | 12.2 | 12.95 | 13.1 | 13.0 | 13.0 | 13.4 | 13.6 | 13.3 | 12.8 | 12.1 | [illegible] |
| 19 | 12.1 | 12.2 | 12.95 | 13.1 | 13.0 | 13.0 | 13.4 | 13.7 | 13.3 | 12.7 | 12.1 | [illegible] |
| 20 | 12.05 | 12.2 | 12.95 | 13.1 | 13.0 | 13.0 | 13.4 | 13.6 | 13.3 | 12.7 | 12.05 | [illegible] |
| 21 | 12.05 | 12.3 | 12.95 | 13.1 | 13.0 | 13.0 | 13.4 | 13.6 | 13.3 | 12.6 | 12.05 | [illegible] |
| 22 | 12.05 | 12.25 | 12.95 | 13.1 | 13.0 | 13.0 | 13.4 | 13.6 | 13.2 | 12.6 | 12.05 | [illegible] |
| 23 | 12.05 | 12.4 | 12.95 | 13.1 | 13.0 | 12.9 | 13.5 | 13.5 | 13.1 | 12.6 | 12.05 | [illegible] |
| 24 | 12.1 | 12.45 | 12.95 | 13.1 | 13.0 | 13.0 | 13.5 | 13.6 | 13.2 | 12.6 | 12.05 | [illegible] |
| 25 | 12.1 | 12.45 | 12.95 | 13.1 | 13.0 | 13.0 | 13.5 | 13.6 | 13.2 | 12.45 | 12.05 | [illegible] |
| 26 | 12.1 | 12.45 | 12.95 | 13.1 | 13.0 | 13.0 | 13.5 | 13.6 | 13.1 | 12.45 | 12.05 | [illegible] |
| 27 | 12.1 | 12.5 | 12.95 | 13.1 | 12.9 | 13.0 | 13.5 | 13.6 | 13.1 | 12.45 | 12.0 | [illegible] |
| 28 | 12.1 | 12.5 | 12.95 | 13.1 | 12.9 | 13.0 | 13.5 | 13.6 | 13.0 | 12.45 | 12.0 | [illegible] |
| 29 | 12.1 | 12.5 | 12.95 | 13.1 | ....... | 13.0 | 13.5 | 13.6 | 13.0 | 12.4 | 12.0 | [illegible] |
| 30 | 12.1 | 12.5 | 12.95 | 13.1 | ....... | 13.0 | 13.5 | 13.6 | 13.0 | 12.4 | 12.0 | [illegible] |
| 31 | 12.1 | ..... | 12.95 | 13.2 | ....... | 13.0 | ....... | 13.6 | 13.1 | 12.4 | 11.95 | ... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 11.95 | 12.15 | 12.35 | 12.5 | 12.8 | 13.0 | 13.2 | 13.1 | [illegible] |
| 2 | 11.95 | 12.15 | 12.35 | 12.5 | 12.8 | 13.0 | 13.2 | 13.1 | [illegible] |
| 3 | 12.00 | 12.15 | 12.35 | 12.5 | 12.8 | 13.1 | 13.2 | 13.1 | [illegible] |
| 4 | 11.95 | 12.15 | 12.40 | 12.5 | 12.8 | 13.1 | 13.2 | 13.1 | [illegible] |
| 5 | 11.95 | 12.10 | 12.45 | 12.6 | 12.8 | 13.2 | 13.2 | 13.1 | [illegible] |
| 6 | 12.05 | 12.10 | 12.40 | 12.6 | 12.8 | 13.2 | 13.2 | 13.1 | [illegible] |
| 7 | 12.05 | 12.15 | 12.40 | 12.7 | 12.9 | 13.2 | 13.2 | 13.1 | [illegible] |
| 8 | 12.05 | 12.04 | 12.40 | 12.7 | 12.8 | 13.2 | 13.2 | 13.1 | [illegible] |
| 9 | 11.95 | 12.05 | 12.40 | 12.7 | 12.8 | 13.2 | 13.2 | 13.1 | [illegible] |
| 10 | 12.00 | 12.25 | 12.40 | 12.7 | 12.8 | 13.2 | 13.1 | 13.1 | [illegible] |
| 11 | 12.00 | 12.25 | 12.45 | 12.7 | 12.8 | 13.2 | 13.2 | 13.1 | [illegible] |
| 12 | 12.05 | 12.25 | 12.45 | 12.7 | 12.8 | 13.2 | 13.1 | 13.2 | [illegible] |
| 13 | 12.15 | 12.25 | 12.45 | 12.6 | 12.8 | 13.2 | 13.1 | 13.1 | [illegible] |
| 14 | 11.93 | 12.25 | 12.45 | 12.7 | 12.8 | 13.3 | 13.2 | 13.1 | [illegible] |
| 15 | 12.05 | 12.25 | 12.45 | 12.7 | 12.8 | 13.3 | 13.2 | 13.0 | [illegible] |
| 16 | 12.05 | 12.25 | 12.45 | 12.7 | 12.8 | 13.3 | 13.2 | 13.1 | [illegible] |
| 17 | 12.05 | 12.25 | 12.45 | 12.7 | 12.8 | 13.2 | 13.1 | 13.0 | [illegible] |
| 18 | 12.05 | 12.30 | 12.45 | 12.7 | 12.9 | 13.2 | 13.0 | 13.1 | [illegible] |
| 19 | 12.05 | 12.30 | 12.45 | 12.7 | 13.0 | 13.2 | 13.0 | 13.0 | [illegible] |
| 20 | 12.10 | 12.30 | 12.45 | 12.7 | 13.0 | 13.2 | 13.1 | 13.1 | [illegible] |
| 21 | 12.10 | 12.30 | 12.45 | 12.7 | 13.0 | 13.2 | 13.2 | 13.1 | [illegible] |
| 22 | 12.05 | 12.30 | 12.45 | 12.7 | 12.9 | 13.2 | 13.1 | 13.0 | [illegible] |
| 23 | 12.05 | 12.35 | 12.45 | 12.7 | 12.9 | 13.2 | 13.2 | 13.0 | [illegible] |
| 24 | 12.10 | 12.35 | 12.45 | 12.8 | 13.0 | 13.2 | 13.1 | 13.0 | [illegible] |
| 25 | 12.10 | 12.30 | 12.45 | 12.8 | 13.0 | 13.2 | 13.1 | 13.0 | [illegible] |
| 26 | 12.10 | 12.35 | 12.45 | 12.8 | 13.0 | 13.2 | 13.1 | 13.0 | [illegible] |
| 27 | 12.10 | 12.35 | 12.45 | 12.7 | 12.9 | 13.2 | 13.1 | 13.0 | [illegible] |
| 28 | 12.10 | 12.35 | 12.45 | 12.7 | 13.0 | 13.2 | 13.1 | 13.0 | [illegible] |
| 29 | 12.10 | 12.35 | 12.45 | 12.7 | 13.0 | 13.2 | 13.1 | 13.0 | [illegible] |
| 30 | 12.10 | 12.35 | 12.45 | 12.8 | ....... | 13.1 | 13.2 | 13.0 | [illegible] |
| 31 | 12.15 | ..... | 12.45 | 12.8 | ....... | 13.2 | ....... | 13.0 | |

NOTE.—Gage heights little affected by ice.

*Rating tables for Klamath River at Keno, Oreg.*

**May 31, 1904, to December 31, 1906.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 11.60 | 900 | 12.60 | 1,960 | 13.60 | 3,730 | 14.60 | 6,590 |
| 11.70 | 970 | 12.70 | 2,100 | 13.70 | 3,960 | 14.70 | 6,940 |
| 11.80 | 1,050 | 12.80 | 2,250 | 13.80 | 4,200 | 14.80 | 7,300 |
| 11.90 | 1,140 | 12.90 | 2,400 | 13.90 | 4,460 | 14.90 | 7,670 |
| 12.00 | 1,240 | 13.00 | 2,560 | 14.00 | 4,730 | 15.00 | 8,050 |
| 12.10 | 1,350 | 13.10 | 2,730 | 14.10 | 5,010 | 15.10 | 8,440 |
| 12.20 | 1,460 | 13.20 | 2,910 | 14.20 | 5,300 | 15.20 | 8,840 |
| 12.30 | 1,580 | 13.30 | 3,100 | 14.30 | 5,600 | 15.30 | 9,250 |
| 12.40 | 1,700 | 13.40 | 3,300 | 14.40 | 5,920 | | |
| 12.50 | 1,830 | 13.50 | 3,510 | 14.50 | 6,250 | | |

NOTE.—Table applicable only to open channel. It is based on 22 discharge measurements made during 1904-5. It is well defined between gage heights 12.2 feet and 13.3 feet.

**January 1, 1907, to December 31, 1910.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 11.50 | 730 | 12.30 | 1,390 | 13.10 | 2,520 | 13.90 | 4,080 |
| 11.60 | 780 | 12.40 | 1,510 | 13.20 | 2,690 | 14.00 | 4,300 |
| 11.70 | 840 | 12.50 | 1,630 | 13.30 | 2,870 | 14.10 | 4,530 |
| 11.80 | 900 | 12.60 | 1,760 | 13.40 | 3,060 | 14.20 | 4,760 |
| 11.90 | 970 | 12.70 | 1,900 | 13.50 | 3,250 | 14.30 | 4,990 |
| 12.00 | 1,060 | 12.80 | 2,050 | 13.60 | 3,450 | 14.40 | 5,220 |
| 12.10 | 1,160 | 12.90 | 2,200 | 13.70 | 3,660 | | |
| 12.20 | 1,270 | 13.00 | 2,360 | 13.80 | 3,870 | | |

NOTE.—Table applicable only to open channel. It is based on discharge measurements made during 1906 to 1909, and is fairly well defined.

*Daily discharge, in second-feet, of Klamath River at Keno, Oreg., for 1909–10.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 1,630 | 2,590 | 3,250 | 3,250 | 3,040 | 2,550 | 1,830 | 1,200 | 928 |
| 2 | 1,620 | 2,600 | 3,250 | 3,250 | 3,040 | 2,540 | 1,820 | 1,180 | 949 |
| 3 | 1,610 | 2,520 | 3,250 | 3,250 | 3,020 | 3,250 | 1,760 | 1,180 | 956 |
| 4 | 1,630 | 2,600 | 3,250 | 3,250 | 3,020 | 3,450 | 1,760 | 1,160 | 949 |
| 5 | 1,750 | 2,660 | 3,250 | 3,250 | 2,960 | 3,250 | 1,750 | 1,140 | 956 |
| 6 | 1,750 | 2,660 | 3,250 | 3,250 | 2,960 | 3,250 | 1,730 | 1,130 | 963 |
| 7 | 1,790 | 2,670 | 3,250 | 3,250 | 2,910 | 2,520 | 1,730 | 1,120 | 963 |
| 8 | 1,870 | 2,690 | 3,250 | 3,250 | 2,890 | 2,520 | 1,720 | 1,110 | 949 |
| 9 | 1,870 | 2,690 | 3,250 | 3,250 | 2,910 | 2,600 | 1,620 | 1,090 | 949 |
| 10 | 1,870 | 2,690 | 3,250 | 3,160 | 2,660 | 2,520 | 1,580 | 1,070 | 963 |
| 11 | 1,870 | 2,690 | 3,250 | 3,160 | 2,710 | 2,520 | 1,560 | 1,050 | 949 |
| 12 | 1,870 | 2,830 | 3,250 | 3,160 | 2,800 | 2,690 | 1,560 | 1,030 | 942 |
| 13 | 1,890 | 2,830 | 3,250 | 3,160 | 2,710 | 2,520 | 1,530 | 1,020 | 935 |
| 14 | 1,900 | 2,830 | 3,250 | 3,160 | 2,740 | 2,310 | 1,510 | 1,010 | 942 |
| 15 | 1,930 | 2,830 | 3,250 | 3,160 | 2,710 | 2,280 | 1,490 | 1,000 | 949 |
| 16 | 2,050 | 2,830 | 3,250 | 3,160 | 2,730 | 2,280 | 1,470 | 988 | 949 |
| 17 | 2,060 | 2,870 | 3,250 | 3,160 | 2,690 | 2,280 | 1,460 | 979 | 914 |
| 18 | 2,050 | 3,020 | 3,250 | 3,060 | 2,710 | 2,280 | 1,460 | 979 | 921 |
| 19 | 2,120 | 3,060 | 3,250 | 3,060 | 2,730 | 2,200 | 1,450 | 963 | 914 |
| 20 | 2,230 | 3,060 | 3,250 | 3,060 | 2,660 | 2,200 | 1,410 | 914 | 870 |
| 21 | 2,230 | 3,060 | 3,250 | 3,060 | 2,690 | 2,220 | 1,390 | 956 | 935 |
| 22 | 2,220 | 3,060 | 3,250 | 3,060 | 2,690 | 2,140 | 1,370 | 888 | 942 |
| 23 | 2,280 | 3,060 | 3,250 | 3,060 | 2,730 | 2,120 | 1,340 | 935 | 935 |
| 24 | 2,520 | 3,060 | 3,250 | 3,060 | 2,660 | 2,140 | 1,320 | 949 | 970 |
| 25 | 2,360 | 3,000 | 3,250 | 3,060 | 2,690 | 2,110 | 1,270 | 942 | 956 |
| 26 | 2,410 | 3,060 | 3,250 | 3,060 | 2,710 | 2,060 | 1,250 | 942 | 949 |
| 27 | 2,440 | 3,060 | 3,250 | 3,060 | 2,520 | 2,060 | 1,220 | 949 | 949 |
| 28 | 2,470 | 3,250 | 3,250 | 3,060 | 2,660 | 2,050 | 1,230 | 935 | 956 |
| 29 | 2,490 | ........ | 3,250 | 3,060 | 2,600 | 2,050 | 1,240 | 956 | 949 |
| 30 | 2,540 | ........ | 3,250 | 3,030 | 2,550 | 2,020 | 1,270 | 921 | 928 |
| 31 | 2,550 | ........ | 3,250 | ........ | 2,660 | ........ | 1,220 | 900 | ........ |

*Monthly discharge of Klamath River at Keno, Oreg., for 1904–1910.*

[Drainage area, 3,150 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1904.** | | | | | | | |
| June | 8,440 | 5,300 | 7,070 | 2.25 | 2.51 | 421,100 | |
| July | 5,300 | 3,300 | 4,177 | 1.33 | 1.53 | 256,800 | |
| August | 3,100 | 2,100 | 2,513 | .798 | .92 | 154,500 | |
| September | 2,100 | 1,700 | 1,778 | .564 | .63 | 105,900 | |
| **1904-5.** | | | | | | | |
| October | 1,830 | 1,700 | 1,775 | .564 | .65 | 109,100 | |
| November | 2,100 | 1,960 | 2,007 | .637 | .71 | 119,400 | |
| December | 2,400 | 2,100 | 2,235 | .709 | .82 | 137,400 | |
| January | 3,100 | 2,400 | 2,716 | .862 | 99 | 167,000 | |
| February | 3,100 | 2,910 | 3,086 | .980 | 1.02 | 171,400 | |
| March | 3,300 | 2,910 | 3,052 | .969 | 1.12 | 187,700 | |
| April | 3,300 | 2,910 | 3,097 | .983 | 1.10 | 184,300 | |
| May | 2,910 | 2,560 | 2,688 | .853 | .98 | 165,300 | |
| June | 2,560 | 1,830 | 2,157 | .685 | .76 | 128,400 | |
| July | 1,830 | 1,140 | 1,436 | .456 | .53 | 88,300 | |
| August | 1,140 | 1,050 | 1,065 | .338 | .39 | 65,480 | |
| September | 1,140 | 1,050 | 1,056 | .335 | .37 | 62,840 | |
| The year | 3,300 | 1,050 | 2,200 | .698 | 9.44 | 1,590,000 | |
| **1905-6.** | | | | | | | |
| October | 1,350 | 1,140 | 1,203 | .382 | .44 | 73,970 | |
| November | 1,580 | 1,350 | 1,445 | .459 | .51 | 85,980 | |
| December | 1,830 | 1,580 | 1,694 | .538 | .62 | 104,200 | |
| January | 2,250 | 1,700 | 2,050 | .651 | .75 | 126,000 | |
| February | 2,250 | 2,100 | 2,180 | .692 | .72 | 121,000 | |
| March | 2,560 | 2,250 | 2,380 | .756 | .87 | 146,000 | |
| April | 3,730 | 2,730 | 3,220 | 1.02 | 1.14 | 192,000 | |
| May | 3,960 | 3,730 | 3,940 | 1.25 | 1.44 | 242,000 | |
| June | 3,960 | 3,300 | 3,710 | 1.18 | 1.32 | 221,000 | |
| July | 3,300 | 2,100 | 2,750 | .873 | 1.01 | 169,000 | |
| August | 1,960 | 1,350 | 1,680 | .533 | .61 | 103,000 | |
| September | 1,350 | 1,240 | 1,280 | .406 | .45 | 76,200 | |
| The year | 3,960 | 1,140 | 2,290 | .727 | 9.88 | 1,660,000 | |
| **1906-7.** | | | | | | | |
| October | 1,460 | 1,240 | 1,290 | .409 | .47 | 79,300 | |
| November | 1,700 | 1,460 | 1,580 | .502 | .56 | 94,000 | |
| December | 2,100 | 1,700 | 1,900 | .603 | .70 | 117,000 | |
| January | 2,200 | 1,900 | 2,030 | .644 | .74 | 125,000 | B. |
| February | 3,660 | 2,200 | 3,120 | .990 | 1.03 | 173,000 | A. |
| March | 4,530 | 3,660 | 4,070 | 1.29 | 1.49 | 250,000 | A. |
| April | 5,220 | 4,530 | 4,920 | 1.56 | 1.74 | 293,000 | A. |
| May | 4,990 | 4,150 | 4,630 | 1.47 | 1.70 | 285,000 | A. |
| June | 4,120 | 3,100 | 3,600 | 1.14 | 1.27 | 214,000 | A. |
| July | 3,060 | 1,900 | 2,430 | .772 | .89 | 149,000 | A. |
| August | 1,830 | 1,390 | 1,530 | .486 | .56 | 94,100 | B. |
| September | 1,450 | 1,220 | 1,310 | .416 | .46 | 78,000 | B. |
| The year | 5,220 | 1,220 | 2,700 | .857 | 11.61 | 1,950,000 | |
| **1907-8.** | | | | | | | |
| October | 1,470 | 1,270 | 1,350 | .429 | .49 | 83,000 | B. |
| November | 1,630 | 1,430 | 1,540 | .489 | .55 | 91,600 | B. |
| December | 2,200 | 1,490 | 1,820 | .578 | .67 | 112,000 | B. |
| January | 2,640 | 2,200 | 2,450 | .778 | .90 | 151,000 | B. |
| February | 2,870 | 2,520 | 2,670 | .848 | .91 | 154,000 | B. |
| March | 4,080 | 2,360 | 2,730 | .867 | 1.00 | 168,000 | B. |
| April | 2,690 | 2,500 | 2,610 | .829 | .92 | 155,000 | B. |
| May | 2,380 | 2,050 | 2,300 | .730 | .84 | 141,000 | C. |
| June | 2,050 | 1,570 | 1,870 | .594 | .66 | 111,000 | C. |
| July | 1,630 | 1,060 | 1,290 | .409 | .47 | 79,300 | C. |
| August | 1,060 | 780 | 925 | .294 | .34 | 56,900 | C. |
| September | 840 | 755 | 801 | .254 | .28 | 47,700 | C. |
| The year | 4,080 | 755 | 1,860 | .592 | 8.03 | 1,350,000 | |

*Monthly discharge of Klamath River at Keno, Oreg., for [illegible]—Continued.*

| Month. | Discharge in second-feet. Maximum. | Minimum. | Mean. | Per square mile. | Run-off. Depth in inches on drainage area. | Total in acre-feet. | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | 36 | [illegible] | [illegible] | |
| [illegible] | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 10,[illegible] | |
| [illegible] | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 5,[illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## KLAMATH RIVER NEAR HAPPY CAMP, CAL.

This station, which is located at Evans Ferry, in the NW. ¼ sec. [illegible], T. 6 N., R. 5 E., about [illegible] miles southeast of Happy Camp, was established September 10, 1911. Indian Creek enters 3½ miles below the station.

The gage is a vertical staff, in two sections, on the left bank. Low-water section is 50 feet and upper section is 1,200 feet below the cable. The channel is composed of bowlders and gravel. Discharge measurements are made from a suspension bridge about 2,000 feet above gage.

Water is diverted from the main river and tributaries above the station for use in irrigation and power development.

Estimates of discharge are withheld until additional data are available.

*Discharge measurements of Klamath River near Happy Camp, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 10 | G. T. Peekema | 2.55 | 1,670 | Jan. 17 | H. J. Tompkins | 4.48 | 4,060 |
| 1912. | | | | May 25 | Lasley Lee | 5.55 | 6,810 |
| Jan. 14 | H. J. Tompkins | 5.38 | 6,530 | 26 | ....do | 5.75 | 7,440 |

*Daily gage height, in feet, of Klamath River near Happy Camp, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | | 2.6 | 2.9 | 3.3 | 3.4 | 4.5 | 4.9 | 4.9 | 6.8 | 5.9 |
| 2 | | 2.65 | 2.9 | 3.3 | 3.4 | 4.5 | 4.8 | 5.0 | 6.8 | 5.9 |
| 3 | | 2.8 | 2.9 | 3.3 | 3.4 | 4.4 | 4.7 | 5.0 | 6.2 | 6.0 |
| 4 | | 2.8 | 2.9 | 3.3 | 3.5 | 4.3 | 4.8 | 5.0 | 6.0 | 5.9 |
| 5 | | 2.7 | 2.9 | 3.3 | 3.4 | 4.4 | 4.8 | 4.9 | 5.9 | 6.0 |
| 6 | | 2.7 | 2.9 | 3.4 | 3.4 | 4.6 | 5.0 | 4.9 | 5.9 | 6.0 |
| 7 | | 2.7 | 3.0 | 3.3 | 3.6 | 4.6 | 5.1 | 4.9 | 6.0 | 5.9 |
| 8 | | 2.8 | 3.0 | 3.3 | 3.7 | 4.8 | 5.0 | 4.9 | 6.2 | 5.9 |
| 9 | | 3.0 | 3.0 | 3.3 | 4.0 | 5.0 | 4.9 | 4.9 | 6.2 | 5.7 |
| 10 | 2.55 | 2.75 | 3.0 | 3.3 | 4.1 | 5.2 | 4.8 | 5.1 | 6.3 | 5.5 |
| 11 | 2.55 | 2.8 | 3.0 | 3.3 | 4.0 | 5.2 | 4.8 | 5.3 | 6.2 | 5.4 |
| 12 | 2.6 | 2.8 | 3.0 | 3.3 | 5.4 | 5.0 | 4.8 | 5.3 | 6.2 | 5.3 |
| 13 | 2.6 | 2.9 | 3.1 | 3.3 | 6.3 | 4.8 | 4.8 | 5.0 | 6.2 | 5.5 |
| 14 | 2.6 | 3.0 | 3.1 | 3.3 | 5.4 | 4.8 | 4.8 | 5.0 | 6.2 | 5.4 |
| 15 | 2.6 | 2.9 | 3.5 | 3.3 | 4.9 | 4.7 | 5.0 | 5.0 | 6.3 | 5.2 |
| 16 | 2.55 | 2.8 | 3.5 | 3.3 | 4.6 | 5.9 | 5.2 | 4.9 | 6.2 | 5.0 |
| 17 | 2.55 | 2.8 | 3.4 | 3.4 | 4.5 | 9.2 | 5.2 | 4.8 | 6.1 | 4.9 |
| 18 | 2.6 | 2.8 | 3.3 | 3.4 | 4.4 | 10.1 | 5.3 | 4.8 | 6.0 | 4.8 |
| 19 | 2.6 | 2.8 | 3.3 | 3.3 | 4.3 | 7.8 | 5.1 | 4.8 | 6.0 | 4.8 |
| 20 | 2.6 | 2.8 | 3.3 | 3.3 | 4.2 | 6.8 | 5.0 | 4.8 | 6.0 | 4.8 |
| 21 | 2.6 | 2.8 | 3.3 | 3.3 | 4.1 | 6.2 | 5.0 | 4.8 | 6.0 | 4.8 |
| 22 | 2.6 | 2.8 | 3.2 | 3.4 | 4.1 | 5.8 | 4.9 | 4.7 | 5.8 | 4.7 |
| 23 | 2.6 | 2.8 | 3.2 | 3.3 | 4.1 | 5.6 | 4.9 | 4.7 | 5.6 | 4.8 |
| 24 | 2.6 | 2.8 | 3.2 | 3.4 | 4.2 | 5.4 | 4.9 | 4.8 | 5.6 | 5.0 |
| 25 | 2.65 | 2.8 | 3.2 | 3.4 | 6.9 | 5.3 | 5.0 | 4.8 | 5.6 | 4.9 |
| 26 | 2.6 | 2.8 | 3.2 | 3.4 | 7.4 | 5.2 | 5.0 | 4.8 | 5.7 | 4.8 |
| 27 | 2.7 | 2.9 | 3.2 | 3.4 | 6.2 | 5.1 | 5.0 | 4.8 | 5.9 | 4.7 |
| 28 | 2.65 | 2.9 | 3.2 | 3.4 | 5.4 | 5.0 | 5.0 | 4.8 | 5.8 | 4.6 |
| 29 | 2.6 | 2.9 | 3.2 | 3.3 | 5.0 | 5.0 | 5.0 | 5.1 | 6.1 | 4.5 |
| 30 | 2.6 | 2.9 | 3.2 | 3.4 | 4.7 | | 4.9 | 5.6 | 6.0 | 4.4 |
| 31 | | 2.9 | | 3.5 | 4.6 | | 4.9 | | 6.0 | |

## KLAMATH RIVER NEAR REQUA, CAL.

This station, which is located at Schofield Ferry, in sec. 29, T. 13 N., R. 2 E., 9 miles above Requa, was established December 26, 1910. It is 30 miles below the mouth of Trinity River and 10 miles above the mouth of Klamath River.

The staff gage is in four sections on the right bank near the ferry. Discharge measurements are made from the ferry or a small boat. The channel is composed of gravel and may shift at high stages. Estimates of discharge are withheld until additional measurements can be secured.

[illegible]

*Daily gage height, in feet, of Klamath River near Requa, Cal., for 1910–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 5.50 | 5.70 | 6.32 | 6.8 | 12.0 | 11.2 | 11.2 | 18.8 | 13.6 |
| 2 | 5.50 | 5.70 | 6.28 | 6.7 | 11.5 | 10.9 | 11.1 | 18.4 | 13.6 |
| 3 | 5.52 | 5.70 | 6.28 | 6.7 | 11.0 | 10.8 | 11.2 | 16.8 | 13.5 |
| 4 | 5.65 | 5.70 | 6.28 | 6.6 | 10.8 | 10.6 | 11.2 | 15.8 | 13.5 |
| 5 | 5.65 | 5.70 | 6.35 | 6.6 | 12.1 | 10.9 | 11.1 | 14.8 | 13.4 |
| 6 | 5.60 | 5.70 | 6.82 | 6.8 | 12.0 | 11.6 | 11.1 | 14.7 | 13.2 |
| 7 | 5.60 | 5.70 | 6.85 | 9.9 | 11.9 | 12.0 | 11.1 | 14.8 | 13.0 |
| 8 | 5.62 | 5.82 | 6.78 | 10.2 | 13.3 | 12.1 | 11.1 | 15.0 | 13.6 |
| 9 | 5.95 | 6.12 | 6.60 | 12.0 | 13.9 | 11.9 | 11.0 | 15.2 | 12.3 |
| 10 | 5.85 | 6.88 | 6.52 | 12.8 | 13.9 | 11.6 | 11.4 | 14.9 | 12.0 |
| 11 | 5.85 | 6.55 | 6.45 | 13.1 | 13.6 | 11.3 | 11.6 | 14.7 | 11.8 |
| 12 | 5.75 | 6.20 | 6.40 | 19.7 | 13.1 | 11.1 | 11.4 | 14.5 | 11.8 |
| 13 | 5.75 | 6.55 | 6.35 | 16.0 | 12.5 | 11.2 | 11.1 | 14.2 | 11.7 |
| 14 | 6.00 | 6.70 | 6.35 | 14.3 | 12.0 | 11.2 | 10.8 | 14.2 | 11.6 |
| 15 | 6.00 | 8.78 | 6.35 | 13.2 | 13.3 | 12.3 | 10.8 | 14.1 | 11.0 |
| 16 | 5.80 | 8.98 | 6.60 | 12.6 | 18.3 | 12.2 | 10.7 | 13.8 | 10.6 |
| 17 | 5.78 | 7.65 | 7.02 | 11.8 | 27.3 | 12.1 | 10.6 | 13.7 | 10.4 |
| 18 | 5.70 | 7.22 | 6.82 | 11.1 | 25.2 | 12.0 | 10.6 | 13.5 | 10.3 |
| 19 | 5.70 | 6.90 | 6.70 | 10.8 | 21.0 | 12.0 | 10.5 | 13.4 | 10.4 |
| 20 | 5.65 | 6.80 | 6.62 | 10.3 | 18.1 | 11.9 | 10.4 | 13.6 | 10.4 |
| 21 | 5.65 | 6.70 | 6.52 | 10.0 | 15.9 | 11.9 | 10.4 | 13.0 | 10.2 |
| 22 | 5.65 | 6.60 | 6.65 | 9.9 | 14.8 | 11.5 | 10.2 | 12.5 | 9.8 |
| 23 | 5.62 | 6.50 | 6.80 | 9.8 | 14.0 | 11.6 | 10.2 | 12.4 | 9.9 |
| 24 | 5.65 | 6.42 | 6.85 | 10.6 | 13.3 | 11.6 | 10.0 | 12.2 | 9.8 |
| 25 | 5.65 | 6.38 | 6.80 | 20.9 | 12.8 | 11.5 | 9.9 | 12.7 | 9.8 |
| 26 | 5.68 | 6.35 | 6.82 | 25.2 | 12.3 | 11.5 | 10.4 | 13.8 | 9.6 |
| 27 | 5.70 | 6.32 | 7.40 | 19.4 | 11.9 | 11.6 | 10.4 | 14.0 | 9.5 |
| 28 | 5.70 | 6.30 | 7.60 | 15.9 | 11.6 | 11.8 | 11.7 | 14.2 | 9.4 |
| 29 | 5.70 | 6.32 | 7.85 | 14.2 | 11.4 | 11.6 | 13.4 | 14.0 | 9.3 |
| 30 | 5.70 | 6.35 | 7.80 | 13.2 | ........ | 11.4 | 15.5 | 13.8 | 9.2 |
| 31 | 5.70 | ........ | 7.20 | 12.6 | ........ | 11.3 | ........ | 13.7 | ........ |

## SYCAN RIVER NEAR SILVERLAKE, OREG.

This station was established May 2, 1905. It was located about 30 miles south of Silverlake, Oreg., in sec. 19, T. 32 S., R. 14 E.

The channel is straight for about 20 feet above and 150 feet below the station. The current is swift. The right bank is high, rocky, and clean and does not overflow. The left bank is low, clean, and subject to overflow at extreme high stages. The bed of the stream is of rocks, gravel, and sand, free from vegetation, and permanent. There is but one channel at low and two channels at high stages.

Discharge measurements were made from a private bridge.

The gage was a vertical staff fastened to a bent of the bridge.

*Discharge measurements of Sycan River near Silverlake, Oreg., in 1905–6.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1905. | | *Feet.* | *Sec.-ft.* | 1905. | | *Feet.* | *Sec.-ft.* |
| Mar. 16 | Ivan Landes | 2.40 | 38 | Nov. 7 | Ivan Landes | 1.12 | 6.0 |
| Apr. 10 | .....do | 3.05 | 110 | 1906. | | | |
| May 2 | .....do | 3.45 | 163 | May 9 | Ivan Landes | 3.20 | 559 |
| June 12 | .....do | 2.32 | 69 | 31 | .....do | 4.80 | 344 |
| July 30 | H. W. King | 1.27 | 10.2 | | | | |
| Oct. 3 | Ivan Landes | 1.70 | 5.4 | | | | |

[illegible]

| [illegible] |
| --- |
| [illegible] |

[illegible]

| [illegible] |
| --- |
| [illegible] |

[illegible]

[illegible]

| [illegible] |
| --- |
| [illegible] |

[illegible]

## [illegible]

[illegible]

States Office of Indian Affairs, and discontinued June 26, 1910, as the observer moved away and no other was obtainable.

The nearest tributary is Spring Creek, 11 miles below the station. Owing to the inaccessibility of the station, it has not been practicable to obtain continuous records of discharge. During the winter months it is almost impossible to reach the station on account of snow.

Discharge measurements are made from a cable and car.

The staff gage was originally located about 1,000 feet above the cable. On October 17, 1908, a Bristol self-registering gage was installed, and as this required only weekly visits by the observer, continuous records were obtained during the remainder of the year. The gage was moved downstream May 30, 1909, to the location of the cable. It was set to read the same as at the former location, but on account of the slope of the river there is no constant relation. The datum of the gage as reset is at an elevation of 4,622.19 feet above sea level. On November 10, 1909, an auxiliary staff gage was installed below the mouth of Spring Creek to be used when the regular station is inaccessible. Simultaneous readings were made on both gages from November, 1909, to June, 1910. The upper gage was washed out during the high water of March, 1910, and was replaced April 15 with a Bristol self-recording gage.

In the meantime weekly readings were continued on the lower gage. The relation between the two gages has been determined and the gage heights for the missing period have been estimated.

Owing to the large storage capacity in Klamath Marsh the river is not subject to great fluctuations. It is probable that weekly observations will give sufficient data for an estimate of the flow.

The accuracy of the results is somewhat affected by the growth of aquatic plants in the river channel during the season, and a comparatively large number of measurements will be necessary in order to secure reliable results.

*Discharge measurements of Williamson River near Klamath Agency, Oreg., in 1908–1910.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1908. | | *Feet.* | *Sec.-ft.* | 1909. | | *Feet.* | *Sec.-ft.* |
| Mar. 26 | C. E. Ellsworth | 2.29 | 792 | Apr. 26 | Stevens and Kimble | 1.62 | 526 |
| 27 | .....do | 2.30 | 824 | May 30 | A. E. Geiger | .93 | 270 |
| Apr. 28 | .....do | 1.56 | 505 | Sept. 30 | John Yadon | .30 | 73 |
| May 15 | H. Kimble | 1.33 | 351 | Nov. 7 | .....do | 1.00 | 239 |
| June 19 | .....do | .90 | 248 | | | | |
| July 16 | .....do | .82 | 162 | 1910. | | | |
| Sept. 26 | .....do | .48 | 67 | Aug. 11[a] | Leland Moser | .54 | 56.2 |
| Oct. 17 | .....do | 1.00 | 184 | | | | |
| Nov. 20 | McGlashan and Kimble | 1.09 | 278 | | | | |

[a] The accuracy of this measurement is very uncertain, as the velocity was very low and the river bed covered with grass and tules.

*Daily gage height, in feet, of Williamson River near Klamath Agency, Oreg., 1908—1910—* Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | |
| 1 | | | | | | | | 1.7 | |
| 2 | | | | 1.8 | | | 2.6 | 1.7 | |
| 3 | 0.31 | | | | | | | 1.65 | |
| 4 | | | | | | | | 1.65 | |
| 5 | | | 1.70 | | | | | 1.65 | |
| 6 | | | | | 1.45 | 2.7 | | 1.65 | 1.0 |
| 7 | | 1.00 | | | | | | 1.65 | 1.0 |
| 8 | | | | | | | | 1.65 | 1.0 |
| 9 | | | | 1.6 | | | | 1.6 | 1.0 |
| 10 | .43 | | | | | | 2.5 | 1.6 | 1.0 |
| 11 | | | | | | | | 1.55 | 1.0 |
| 12 | | | 2.40 | | | | | 1.55 | 1.0 |
| 13 | | | | | 1.25 | 3.7 | | 1.5 | 1.0 |
| 14 | | 1.20 | | | | | | 1.5 | .95 |
| 15 | | | | | | | 2.1 | 1.5 | .95 |
| 16 | | | | 1.2 | | | 2.1 | 1.5 | .95 |
| 17 | .47 | | | | | | 2.1 | 1.3 | .95 |
| 18 | | | | | | | 2.1 | 1.2 | .9 |
| 19 | | | 2.30 | | | | 2.1 | 1.0 | .9 |
| 20 | | | | | 1.25 | 3.4 | 1.9 | 1.05 | |
| 21 | | 1.90 | | | | | 1.85 | 1.35 | |
| 22 | | | | | | | 1.9 | 1.2 | |
| 23 | | | | 1.15 | | | 1.85 | 1.2 | |
| 24 | .70 | | | | | | 1.85 | 1.1 | |
| 25 | | | | | | | 1.75 | 1.1 | |
| 26 | | | 1.90 | | | | 1.8 | 1.1 | .9 |
| 27 | | | | | 1.6 | 3.1 | 1.75 | 1.0 | |
| 28 | | 2.50 | | | | | 1.7 | 1.0 | |
| 29 | | | | | | | 1.7 | 1.1 | |
| 30 | | | | 1.45 | | | 1.7 | | |
| 31 | .85 | | | | | | | | |

*Daily gage height, in feet, of Williamson River below Spring Creek, near Klamath Agency, Oreg., for 1910.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | 16 | 0.20 | | | | | |
| 2 | 0.70 | | | 1.10 | | | 17 | | | | | | |
| 3 | | | | | | | 18 | | | | | | |
| 4 | | | | | | | 19 | | | | | | 0.0 |
| 5 | | | | | | | 20 | | 0.10 | 1.90 | | | |
| 6 | | 0.20 | 1.30 | | | 0.0 | 21 | | | | | | |
| 7 | | | | | | | 22 | | | | | 1.5 | |
| 8 | | | | | 0.27 | | 23 | .17 | | | | | |
| 9 | .60 | | | | | | 24 | | | | 0.35 | | |
| 10 | | | | 1.00 | | | 25 | | | | | | |
| 11 | | | | | | | 26 | | | | | | .0 |
| 12 | | | | | | .0 | 27 | | .10 | 1.60 | | | |
| 13 | | .15 | 2.20 | | | | 28 | | | | | | |
| 14 | | | | | | | 29 | | | | | .10 | |
| 15 | | | | | .20 | | 30 | .25 | | | .30 | | |
| | | | | | | | 31 | | | | | | |

**Rating table for Williamson River near Klamath Agency** [illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible] Williamson [illegible] Klamath [illegible]
19[illegible]

| [illegible] | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| [illegible] | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | [illegible] |
|---|---|---|---|---|---|---|---|---|---|
| 190[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

*Monthly discharge of Williamson River near Klamath Agency, Oreg., for 1908–1910.*

[Drainage area, 840 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1908.** | | | | | | | |
| March 25-31 | 821 | 803 | 813 | 0.968 | 0.25 | 11,300 | A. |
| April | 798 | 464 | 621 | .739 | .82 | 37,000 | B. |
| May | | | 375 | .446 | .51 | 23,100 | C. |
| June | | | 201 | .239 | .27 | 12,000 | C. |
| July | | | 172 | .205 | .24 | 10,600 | C. |
| August | | | 130 | .155 | .18 | 7,990 | C. |
| September | | | 86 | .102 | .11 | 5,120 | C. |
| The period | | | | | | 107,000 | |
| **1908-9.** | | | | | | | |
| October | 251 | 72 | 166 | .198 | .23 | 10,200 | B. |
| November | 300 | 239 | 261 | .311 | .35 | 15,500 | B. |
| December | 263 | 165 | 235 | .280 | .32 | 14,400 | B. |
| January 1-14 | | | 362 | .431 | .22 | 10,100 | B, |
| April 18-30 | | | 532 | .633 | .31 | 13.700 | D. |
| May | | | 299 | .356 | .41 | 18,400 | C. |
| June | | | 183 | .218 | .24 | 10,900 | C. |
| July | | | 118 | .140 | .16 | 7,260 | C. |
| August | | | 73.5 | .088 | .10 | 4,520 | C. |
| September | | | 68.4 | .081 | .09 | 4,070 | C. |
| **1909-10.** | | | | | | | |
| October | | | 124 | .147 | .17 | 7,620 | C. |
| November | | | 502 | .598 | .67 | 29,900 | C. |
| December | | | 734 | .874 | 1.01 | 45,100 | C. |
| January | 567 | 288 | 412 | .491 | .57 | 25,300 | C. |
| February | 620 | 329 | 364 | .433 | .45 | 20,200 | C. |
| March | 1,590 | 600 | 1,240 | 1.48 | 1.71 | 76,200 | C. |
| April | 1,040 | 567 | 785 | .935 | 1.04 | 46,700 | B. |
| May | 567 | 288 | 424 | .505 | .58 | 26,100 | B. |
| June 1-26 | 293 | 230 | 255 | .304 | .29 | 13,200 | B. |
| The period | | | | | | 290,000 | |

## WILLIAMSON RIVER AT CHILOQUIN, OREG.

This station, which is located in sec. 3, T. 35 S., R. 7 E., at the highway bridge at Chiloquin, just above the mouth of Sprague River, was established July 25, 1911.

The gage is a vertical staff on the wagon bridge, from which discharge measurements are made. The channel is composed of rocks and gravel and is probably permanent. Conditions are not particularly favorable, but fairly reliable results have been obtained.

The station is maintained by the United States Reclamation Service and the records are worked up and published by the Survey.

*Discharge measurements of Williamson River at Chiloquin, Oreg., in 1911–12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| July 25 | L. Moser | 4.00 | 579 | Feb. 20 | L. Moser | 5.40 | 1,400 |
| Nov. 21 | W. O. Harmon | 4.40 | 740 | May 3 | H. Kimble | 4.54 | 761 |

*Daily gage height, in feet, of Williamson River at Chiloquin, Oreg., for [illegible].*

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | | | [illegible] | | | [illegible] | |
| [illegible] | [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 4.[illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] |
| [illegible] | 4 | [illegible] | [illegible] | 4.[illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 4.[illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | 4.[illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 2 [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | | | | | | [illegible] | [illegible] |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-1[illegible] | | | | | | | | | |
| | 3.[illegible] | 4.[illegible] | 4.5 | 4.[illegible] | 4.7 | 5.2 | 4.[illegible] | 4.[illegible] | [illegible] |
| | 3.[illegible] | 4.[illegible] | 4.5 | 4.2 | 4.7 | 5.[illegible] | 4.[illegible] | [illegible] | |
| | 3.9 | 4.2 | 4.[illegible] | 4.2 | 4.8 | 5.2 | 4.[illegible] | 4.[illegible] | |
| | 3.[illegible] | 4.2 | 4.5 | 4.2 | 4.8 | 5.2 | 4.[illegible] | 4.[illegible] | |
| | 3.9 | 4.2 | 4.5 | 4.2 | 4.8 | 5.[illegible] | 4.[illegible] | 4.[illegible] | [illegible] |
| | 3.9 | 4.2 | 4.5 | 4.2 | 4.8 | 5.3 | 4.7 | 4.[illegible] | [illegible] |
| | 3.9 | 4.2 | 4.5 | 4.2 | 4.9 | 5.[illegible] | 4.7 | 4.[illegible] | [illegible] |
| | 3.9 | 4.2 | 4.5 | 4.2 | 4.9 | 5.3 | 4.7 | 4.[illegible] | [illegible] |
| | 3.9 | 4.2 | 4.5 | 4.2 | 4.9 | 5.[illegible] | 4.7 | 4.[illegible] | |
| | 3.9 | 4.2 | 4.5 | 4.2 | 4.9 | 5.[illegible] | 4.7 | 4.[illegible] | [illegible] |
| | 3.9 | 4.2 | 4.5 | 4.2 | 4.9 | 5.2 | 4.7 | 4.[illegible] | [illegible] |
| | 3.9 | 4.2 | 4.5 | 4.2 | 4.9 | 5.2 | 4.7 | [illegible] | |
| | 4.0 | 4.2 | 4.5 | 4.2 | 5.0 | 5.1 | 4.7 | 4.[illegible] | [illegible] |
| | 4.1 | 4.2 | 4.5 | 4.2 | 5.1 | 5.1 | 4.7 | [illegible] | [illegible] |
| | 4.1 | 4.2 | 4.5 | 4.2 | 5.2 | 5.1 | 4.[illegible] | 4.[illegible] | [illegible] |
| | 4.0 | 4.3 | 4.5 | 4.2 | 5.3 | 5.0 | 4.[illegible] | 4.[illegible] | [illegible] |
| | 4.1 | 4.3 | 4.5 | 4.2 | 5.5 | 5.0 | 4.[illegible] | 4.[illegible] | [illegible] |
| | 4.1 | 4.3 | 4.5 | 4.3 | 5.5 | 5.[illegible] | 4.[illegible] | 4.[illegible] | [illegible] |
| | 4.1 | 4.3 | 4.5 | 4.3 | 5.6 | 5.[illegible] | 4.[illegible] | 4.[illegible] | [illegible] |
| | 4.1 | 4.5 | 4.5 | 4.3 | 5.3 | 5.0 | 4.[illegible] | 4.[illegible] | [illegible] |
| | 4.1 | 4.3 | 4.4 | 4.3 | 5.5 | 5.0 | 4.[illegible] | 4.[illegible] | [illegible] |
| | 4.[illegible] | 4.4 | 4.4 | 4.3 | 5.[illegible] | 5.[illegible] | 4.[illegible] | 4.[illegible] | [illegible] |
| | 4.[illegible] | 4.4 | 4.3 | 4.4 | 5.3 | 5.0 | 4.[illegible] | 4.[illegible] | |
| | [illegible] | 4.4 | 4.[illegible] | 4.4 | 5.3 | 4.9 | 4.[illegible] | [illegible] | [illegible] |
| | 4.[illegible] | 4.4 | 4.2 | 4.[illegible] | 5.[illegible] | 4.9 | 4.[illegible] | 4.[illegible] | [illegible] |
| | 4.[illegible] | 4.4 | 4.2 | 4.[illegible] | 5.3 | 4.[illegible] | 4.[illegible] | 4.[illegible] | [illegible] |
| | [illegible] | 4.4 | 4.[illegible] | 4.5 | 5.[illegible] | 4.[illegible] | [illegible] | 4.[illegible] | [illegible] |
| | [illegible] | 4.[illegible] | 4.[illegible] | 4.[illegible] | 5.[illegible] | 4.[illegible] | [illegible] | 4.[illegible] | |
| | [illegible] | 4.[illegible] | 4.[illegible] | 4.[illegible] | 5.2 | 4.[illegible] | 4.[illegible] | 4.[illegible] | [illegible] |
| | [illegible] | 4.[illegible] | 4.[illegible] | 4.[illegible] | | 4.[illegible] | 4.[illegible] | 4.[illegible] | [illegible] |
| | [illegible] | | 4.[illegible] | 4.[illegible] | | 4.[illegible] | | [illegible] | |

*Daily discharge, in second-feet, of Williamson River at Chiloquin, Oreg., for 1911-12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | 580 | 560 | 11 | 580 | 560 | 21 | 560 | 560 |
| 2 | 580 | 560 | 12 | 580 | 560 | 22 | 560 | 560 |
| 3 | 580 | 560 | 13 | 580 | 560 | 23 | 560 | 560 |
| 4 | 580 | 560 | 14 | 580 | 560 | 24 | 560 | 560 |
| 5 | 580 | 560 | 15 | 580 | 560 | 25 | 560 | 560 |
| 6 | 580 | 560 | 16 | 580 | 560 | 26 | 560 | 560 |
| 7 | 580 | 560 | 17 | 580 | 560 | 27 | 560 | 560 |
| 8 | 580 | 560 | 18 | 580 | 560 | 28 | 560 | 560 |
| 9 | 580 | 560 | 19 | 580 | 560 | 29 | 560 | 560 |
| 10 | 580 | 560 | 20 | 560 | 560 | 30 | 560 | 560 |
| | | | | | | 31 | 560 | ...... |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 560 | 650 | 790 | 650 | 890 | 1,230 | 1,010 | 790 | 650 |
| 2 | 560 | 650 | 790 | 650 | 900 | 1,230 | 1,010 | 790 | 650 |
| 3 | 560 | 650 | 790 | 650 | 950 | 1,230 | 950 | 830 | 650 |
| 4 | 560 | 650 | 790 | 650 | 950 | 1,230 | 950 | 830 | 650 |
| 5 | 560 | 650 | 790 | 650 | 950 | 1,230 | 950 | 830 | 650 |
| 6 | 560 | 650 | 790 | 650 | 950 | 1,310 | 890 | 830 | 650 |
| 7 | 560 | 650 | 790 | 650 | 1,010 | 1,310 | 890 | 830 | 610 |
| 8 | 560 | 650 | 790 | 650 | 1,010 | 1,310 | 890 | 790 | 610 |
| 9 | 560 | 650 | 790 | 650 | 1,010 | 1,230 | 890 | 790 | 610 |
| 10 | 560 | 650 | 790 | 650 | 1,010 | 1,230 | 890 | 730 | 610 |
| 11 | 560 | 650 | 790 | 650 | 1,010 | 1,230 | 890 | 730 | 610 |
| 12 | 560 | 650 | 790 | 650 | 1,010 | 1,230 | 890 | 730 | 610 |
| 13 | 560 | 650 | 790 | 650 | 1,080 | 1,150 | 890 | 730 | 610 |
| 14 | 610 | 650 | 790 | 650 | 1,150 | 1,150 | 890 | 730 | 610 |
| 15 | 610 | 650 | 790 | 650 | 1,230 | 1,150 | 830 | 730 | 610 |
| 16 | 580 | 690 | 790 | 650 | 1,310 | 1,080 | 830 | 690 | 610 |
| 17 | 610 | 690 | 790 | 650 | 1,310 | 1,080 | 830 | 690 | 610 |
| 18 | 610 | 690 | 790 | 690 | 1,310 | 1,080 | 830 | 730 | 610 |
| 19 | 610 | 690 | 790 | 690 | 1,310 | 1,080 | 830 | 730 | 610 |
| 20 | 610 | 690 | 780 | 690 | 1,310 | 1,080 | 830 | 690 | 610 |
| 21 | 610 | 690 | 730 | 690 | 1,310 | 1,080 | 830 | 690 | 580 |
| 22 | 610 | 730 | 730 | 690 | 1,310 | 1,080 | 830 | 690 | 580 |
| 23 | 610 | 730 | 690 | 730 | 1,310 | 1,080 | 830 | 690 | 580 |
| 24 | 610 | 730 | 690 | 730 | 1,310 | 1,010 | 790 | 690 | 580 |
| 25 | 610 | 730 | 650 | 780 | 1,310 | 1,010 | 780 | 690 | 580 |
| 26 | 650 | 730 | 650 | 780 | 1,310 | 1,010 | 780 | 650 | 580 |
| 27 | 650 | 730 | 650 | 780 | 1,310 | 1,010 | 780 | 650 | 580 |
| 28 | 650 | 790 | 650 | 780 | 1,310 | 1,010 | 780 | 690 | 580 |
| 29 | 650 | 790 | 650 | 780 | 1,230 | 1,010 | 780 | 690 | 580 |
| 30 | 650 | 780 | 650 | 830 | ........ | 1,010 | 780 | 690 | 580 |
| 31 | 650 | ........ | 650 | 830 | ........ | 1,010 | ........ | 690 | ........ |

NOTE.—Daily discharge determined from a fairly well-defined rating curve.

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] |
|---|---|---|
| [illegible] | [illegible] | [illegible] |

*aily gage height, in feet, of Wood River at Fort Klamath, Oreg., for 1911-12*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| | 1.45 | 1.40 | 1.46 | 1.30 | 1.32 | 1.30 | 1.40 | 1.22 | 1.25 |
| | 1.45 | 1.40 | 1.45 | 1.25 | 1.35 | 1.30 | 1.35 | 1.22 | 1.30 |
| | 1.45 | 1.40 | 1.45 | 1.20 | 1.30 | 1.30 | 1.32 | 1.20 | 1.30 |
| | 1.50 | 1.40 | 1.42 | 1.20 | 1.30 | 1.25 | 1.30 | 1.20 | 1.25 |
| | 1.50 | 1.38 | 1.45 | 1.20 | 1.32 | 1.30 | 1.28 | 1 25 | 1.30 |
| | 1.45 | 1.40 | 1.48 | 1.25 | 1.35 | 1.35 | 1.25 | 1.25 | 1.40 |
| | 1.45 | 1.45 | 1.45 | 1.27 | 1.35 | 1.30 | 1.28 | 1.28 | 1.45 |
| | 1.45 | 1.50 | 1.43 | 1.30 | 1.40 | 1.25 | 1.25 | 1.30 | 1.45 |
| | 1.45 | 1.50 | 1.40 | 1.32 | 1.45 | 1.25 | 1.25 | 1.32 | 1.40 |
| | 1.45 | 1.50 | 1.40 | 1.40 | 1.50 | 1.25 | 1.30 | 1.35 | 1.30 |
| | 1.45 | 1.50 | 1.40 | 1.45 | 1.45 | 1.25 | 1.30 | 1.35 | 1.30 |
| | 1.45 | 1.55 | 1.40 | 1.50 | 1.38 | 1.25 | 1.25 | 1.30 | 1.40 |
| | 1.45 | 1.60 | 1.45 | 1.50 | 1.35 | 1.25 | 1.25 | 1.30 | 1.30 |
| | 1.45 | 1.65 | 1.48 | 1.55 | 1.35 | 1.25 | 1.22 | 1.30 | 1.30 |
| | 1.45 | 1.80 | 1 50 | 1.60 | 1.40 | 1.25 | 1.20 | 1.30 | 1.30 |
| | 1.45 | 1.65 | 1.45 | 1.60 | 1.75 | 1.25 | 1.20 | 1.32 | 1.25 |
| | 1.45 | 1.55 | 1.40 | 1.55 | 2.80 | 1.25 | 1.20 | 1.30 | 1.25 |
| | 1.45 | 1.60 | 1.40 | 1.55 | 1 90 | 1.25 | 1.20 | 1.25 | 1.20 |
| | 1.45 | 1.55 | 1.35 | 1.50 | 1.55 | 1.20 | 1.20 | 1.25 | 1.30 |
| | 1.45 | 1.50 | 1.30 | 1.45 | 1.45 | 1.20 | 1.20 | 1.20 | 1.40 |
| | 1.45 | 1.50 | 1.20 | 1.40 | 1.35 | 1.20 | 1.20 | 1.15 | 1.50 |
| | 1.45 | 1.50 | 1.20 | 1.35 | 1.35 | 1.20 | 1.20 | 1.10 | 1.50 |
| | 1.40 | 1.48 | 1.25 | 1.35 | 1.35 | 1.25 | 1.20 | 1.10 | 1.85 |
| | 1.40 | 1.48 | 1.25 | 1.38 | 1.25 | 1.30 | 1.20 | 1.05 | 1.80 |
| | 1.40 | 1.46 | 1.25 | 1.43 | 1.30 | 1.35 | 1.20 | 1.05 | 1.80 |
| | 1.40 | 1.45 | 1.30 | 1.45 | 1.35 | 1.40 | 1.20 | 1.10 | 1.80 |
| | 1.40 | 1.45 | 1.30 | 1.40 | 1.30 | 1.45 | 1.22 | 1.10 | 1.75 |
| | 1.40 | 1.44 | 1.25 | 1.38 | 1.30 | 1.45 | 1.25 | 1.15 | 1.70 |
| | 1.40 | 1.45 | 1.25 | 1.35 | 1.30 | 1.45 | 1.25 | 1.20 | 1.70 |
| | 1.40 | 1.50 | 1.27 | 1.35 | ........ | 1.40 | 1.25 | 1.20 | 1.70 |
| | 1.40 | ........ | 1.30 | 1.32 | ........ | 1.35 | ........ | 1.20 | ........ |

## LOST RIVER NEAR CLEAR LAKE, CAL.

This station, which is located 13 miles from Langell, Oreg., at the outlet of Clear Lake, 1 mile below the mouth of Willow Creek, was established September 1, 1904, and discontinued June 13, 1909.

Clear Lake is the site of a reservoir, and a dam at the outlet has been constructed by the United States Reclamation Service, where it is proposed to store the flood and winter flow of the stream for irrigation. The reservoir will hold three years' run-off.

In the winter months the stream is frequently frozen for weeks at a time, and for such periods the records are not reliable. Until construction work was begun on the dam it was almost impossible to procure gage observations with any degree of regularity. A Friez automatic water register was established November 4, 1905, which required weekly visits by the observer, but as he was compelled to ride 12 miles to change the record sheets, it was not always possible for him to do so. Where missing records could be estimated with a reasonable degree of accuracy, it has been done.

The conditions at the station during low stages of the river are not conducive to accurate results. The channel is obstructed by the growth of weeds and aquatic plants, and a large number of measurements are required for reliable estimates of flow. At such times,

[illegible]

[illegible]

[illegible]

| | | | |
|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

*Daily gage height, in feet, of Lost River near Clear Lake, Cal., for 1904-1909*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1904-5. | | | | | | | | | |
| 1 | 5.25 | 5.2 | 5.2 | 5.4 | 7.3 | 6.3 | 6.9 | 5.3 | 5.0 |
| 2 | 5.25 | 5.2 | 5.2 | 5.4 | 7.8 | 6.2 | 7.5 | 5.3 | 5.0 |
| 3 | 5.25 | 5.15 | ........ | 5.4 | 7.3 | 6.3 | 7.2 | 5.2 | 5.05 |
| 4 | 5.25 | 5.1 | ........ | 5.4 | 7.1 | 6.3 | 6.9 | 5.2 | 5.1 |
| 5 | 5.25 | ........ | ........ | 5.4 | 6.8 | 6.4 | 6.7 | 5.1 | 5.15 |
| 6 | 5.25 | ........ | 5.2 | 5.4 | 6.5 | 6.3 | 6.6 | 5.1 | 5.2 |
| 7 | 5.25 | ........ | 5.2 | 5.4 | 6.3 | 6.5 | 6.4 | 5.15 | 5.35 |
| 8 | 5.25 | 5.15 | 5.15 | 5.4 | 6.1 | 6.4 | 6.2 | 5.2 | 5.6 |
| 9 | 5.25 | 5.15 | 5.15 | 5.4 | 5.8 | 6.3 | 6.0 | 5.2 | 5.9 |
| 10 | 5.3 | 5.15 | ........ | 5.4 | 5.6 | 6.2 | 5.8 | 5.2 | 5.8 |
| 11 | 5.3 | 5.15 | ........ | 5.4 | 5.2 | 6.2 | 5.7 | 5.3 | 5.7 |
| 12 | 5.3 | ........ | ........ | 5.4 | 6.05 | 6.3 | 5.8 | 5.4 | 5.6 |
| 13 | 5.3 | ........ | 5.2 | 5.4 | 6.95 | 6.5 | 5.7 | 5.35 | 5.4 |
| 14 | 5.3 | ........ | 5.25 | 5.6 | 6.9 | 6.2 | 5.5 | 5.3 | 5.25 |
| 15 | 5.3 | 5.15 | 5.3 | 5.8 | 6.7 | 6.1 | 5.5 | 5.25 | 5.1 |
| 16 | 5.3 | 5.2 | 5.3 | 6.0 | 6.2 | 6.3 | 5.55 | 5.2 | 5.0 |
| 17 | 5.25 | 5.2 | ........ | 6.25 | 5.6 | 6.9 | 5.6 | 5.15 | 5.0 |
| 18 | 5.25 | 5.2 | ........ | 6.3 | 5.5 | 6.7 | 5.6 | 5.1 | 5.0 |
| 19 | 5.2 | ........ | ........ | 6.3 | 5.8 | 6.3 | 5.7 | 5.05 | 5.0 |
| 20 | 5.2 | ........ | 5.3 | 6.3 | 6.4 | 6.4 | 5.5 | 5.05 | 5.0 |
| 21 | 5.15 | ........ | 5.15 | 6.35 | 6.3 | 6.6 | 5.5 | 5.0 | 5.0 |
| 22 | 5.15 | ........ | 5.2 | 6.4 | 6.2 | 6.9 | 5.5 | 5.0 | 5.0 |
| 23 | ........ | 5.2 | 5.2 | 6.4 | 6.0 | 6.9 | 5.45 | 5.0 | 5.0 |
| 24 | ........ | 5.2 | ........ | 6.45 | 6.1 | 6.5 | 5.4 | 4.95 | 5.0 |
| 25 | 5.1 | 5.2 | ........ | 6.5 | 6.2 | 6.3 | 5.4 | 4.9 | 5.0 |
| 26 | 5.1 | 5.2 | ........ | 6.3 | 6.0 | 6.5 | 5.5 | 4.9 | 5.0 |
| 27 | 5.1 | ........ | ........ | 6.0 | 6.1 | 6.9 | 5.4 | 4.95 | 5.0 |
| 28 | 5.1 | 5.2 | ........ | 6.2 | 6.2 | 6.6 | 5.3 | 5.0 | 5.0 |
| 29 | ........ | 5.2 | ........ | 6.4 | ........ | 6.7 | 5.3 | 5.05 | 5.0 |
| 30 | ........ | ........ | ........ | 6.6 | ........ | 6.0 | 5.3 | 5.1 | 5.0 |
| 31 | ........ | ........ | ........ | 6.8 | ........ | 6.4 | ........ | 5.05 | ........ |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905-6. | | | | | | | | | | | | |
| 1 | ....... | 5.1 | 5.15 | 5.2 | 5.5 | 6.45 | 9.3 | 6.95 | 6.45 | 5.25 | 5.1 | 5.1 |
| 2 | ....... | 5.1 | 5.15 | 5.2 | 5.5 | 6.15 | 9.1 | 6.85 | 6.3 | 5.2 | 5.1 | 5.1 |
| 3 | ....... | 5.1 | 5.2 | 5.2 | 5.5 | 6.2 | 9.0 | 6.8 | 6.3 | 5.2 | 5.1 | 5.1 |
| 4 | ....... | 5.1 | 5.2 | 5.2 | 5.5 | 6.15 | 9.0 | 6.75 | 6.3 | 5.1 | 5.1 | 5.1 |
| 5 | ....... | 5.1 | 5.2 | 5.2 | 5.5 | 6.2 | 9.05 | 6.5 | 6.3 | 5.05 | 5.1 | 5.1 |
| 6 | ....... | 5.1 | 5.2 | 5.2 | 5.5 | 6.55 | 9.1 | 6.45 | 6.4 | 5.0 | 5.1 | 5.1 |
| 7 | ....... | 5.1 | 5.2 | 5.2 | 5.5 | 7.1 | 9.25 | 6.4 | 6.6 | 5.0 | 5.1 | 5.1 |
| 8 | ....... | 5.1 | 5.15 | 5.2 | 5.5 | 7.25 | 9.3 | 6.35 | 6.55 | 5.0 | 5.1 | 5.1 |
| 9 | ....... | 5.1 | 5.15 | 5.2 | 5.5 | 7.2 | 9.4 | 6.3 | 6.45 | 5.0 | 5.1 | 5.1 |
| 10 | ....... | 5.1 | 5.15 | 5.2 | 5.5 | 7.4 | 9.4 | 6.25 | 6.2 | 5.0 | 5.1 | 5.1 |
| 11 | ....... | 5.1 | 5.15 | 5.3 | 5.5 | 7.8 | 9.3 | 6.25 | 6.2 | 5.3 | 5.1 | 5.1 |
| 12 | ....... | 5.1 | 5.15 | 5.3 | 5.5 | 7.75 | 9.3 | 6.2 | 6.1 | 5.25 | 5.1 | 5.1 |
| 13 | ....... | 5.1 | 5.15 | 5.3 | 5.5 | 7.75 | 9.2 | 6.2 | 6.1 | 5.2 | 5.1 | 5.2 |
| 14 | ....... | 5.1 | 5.15 | 5.4 | 5.5 | 7.75 | 9.0 | 6.2 | 6.0 | 5.2 | 5.1 | 5.2 |
| 15 | ....... | 5.1 | 5.15 | 5.4 | 5.75 | 7.75 | 8.75 | 6.2 | 5.9 | 5.2 | 5.1 | 5.2 |
| 16 | ....... | 5.1 | 5.2 | 5.5 | 5.85 | 7.75 | 8.5 | 6.2 | 5.85 | 5.2 | 5.1 | 5.2 |
| 17 | ....... | 5.1 | 5.2 | 5.55 | 5.8 | 7.75 | 8.4 | 6.2 | 5.85 | 5.2 | 5.1 | 5.2 |
| 18 | ....... | 5.1 | 5.2 | 5.55 | 5.8 | 7.85 | 8.2 | 6.2 | 5.8 | 5.2 | 5.1 | 5.2 |
| 19 | ....... | 5.1 | 5.2 | 5.55 | 6.0 | 8.0 | 8.0 | 6.1 | 5.7 | 5.15 | 5.1 | 5.2 |
| 20 | ....... | 5.2 | 5.2 | 5.55 | 6.7 | 8.1 | 7.8 | 6.1 | 5.6 | 5.15 | 5.1 | 5.2 |
| 21 | ....... | 5.15 | 5.2 | 5.55 | 6.8 | 8.2 | 7.7 | 6.05 | 5.5 | 5.15 | 5.1 | 5.2 |
| 22 | ....... | 5.15 | 5.2 | 5.55 | 6.85 | 8.3 | 7.65 | 6.05 | 5.5 | 5.1 | 5.1 | 5.2 |
| 23 | ....... | 5.15 | 5.2 | 5.55 | 6.55 | 8.4 | 7.55 | 6.05 | 5.4 | 5.1 | 5.1 | 5.2 |
| 24 | ....... | 5.15 | 5.2 | 5.5 | 6.25 | 8.5 | 7.55 | 6.0 | 5.35 | 5.1 | 5.1 | 5.2 |
| 25 | ....... | 5.15 | 5.2 | 5.5 | 6.0 | 8.7 | 7.4 | 6.0 | 5.3 | 5.1 | 5.1 | 5.2 |
| 26 | ....... | 5.2 | 5.2 | 5.5 | 6.2 | 8.8 | 7.25 | 6.0 | 5.4 | 5.1 | 5.1 | 5.2 |
| 27 | ....... | 5.2 | 5.2 | 5.5 | 6.9 | 8.8 | 7.2 | 6.2 | 5.45 | 5.1 | 5.1 | 5.2 |
| 28 | ....... | 5.2 | 5.2 | 5.5 | 6.6 | 8.8 | 7.1 | 6.4 | 5.35 | 5.1 | 5.1 | 5.2 |
| 29 | 5.1 | 5.15 | 5.2 | 5.5 | ....... | 8.75 | 7.0 | 6.5 | 5.35 | 5.1 | 5.1 | 5.2 |
| 30 | 5.1 | 5.15 | 5.2 | 5.5 | ....... | 8.8 | 7.0 | 6.6 | 5.35 | 5.1 | 5.1 | 5.2 |
| 31 | 5.1 | ....... | 5.2 | 5.5 | ....... | 9.3 | ....... | 6.6 | ....... | 5.1 | 5.1 | ....... |

[illegible]

*Daily gage height, in feet, of Williamson River near Klamath Agency, Oreg., 1909—1910*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | |
| 1 | | | | | | | | 1.7 | |
| 2 | | | | 1.8 | | | 2.6 | 1.7 | |
| 3 | 0.31 | | | | | | | 1.65 | |
| 4 | | | | | | | | 1.65 | |
| 5 | | | 1.70 | | | | | 1.65 | |
| 6 | | | | | 1.45 | 2.7 | | 1.65 | 1.0 |
| 7 | | 1.00 | | | | | | 1.65 | 1.0 |
| 8 | | | | | | | | 1.65 | 1.0 |
| 9 | | | | 1.6 | | | | 1.6 | 1.0 |
| 10 | .43 | | | | | | 2.5 | 1.6 | 1.0 |
| 11 | | | | | | | | 1.55 | 1.0 |
| 12 | | | 2.40 | | | | | 1.55 | 1.0 |
| 13 | | | | | 1.25 | 3.7 | | 1.5 | 1.0 |
| 14 | | 1.20 | | | | | | 1.5 | .95 |
| 15 | | | | | | | 2.1 | 1.5 | .95 |
| 16 | | | | 1.2 | | | 2.1 | 1.5 | .95 |
| 17 | .47 | | | | | | 2.1 | 1.3 | .95 |
| 18 | | | | | | | 2.1 | 1.2 | .9 |
| 19 | | | 2.30 | | | | 2.1 | 1.0 | .9 |
| 20 | | | | | 1.25 | 3.4 | 1.9 | 1.05 | |
| 21 | | 1.90 | | | | | 1.85 | 1.35 | |
| 22 | | | | | | | 1.9 | 1.2 | |
| 23 | | | | 1.15 | | | 1.85 | 1.2 | |
| 24 | .70 | | | | | | 1.85 | 1.1 | |
| 25 | | | | | | | 1.75 | 1.1 | |
| 26 | | | 1.90 | | | | 1.8 | 1.1 | .9 |
| 27 | | | | | 1.6 | 3.1 | 1.75 | 1.0 | |
| 28 | | 2.50 | | | | | 1.7 | 1.0 | |
| 29 | | | | | | | 1.7 | 1.1 | |
| 30 | | | | 1.45 | | | 1.7 | | |
| 31 | .85 | | | | | | | | |

*Daily gage height, in feet, of Williamson River below Spring Creek, near Klamath Agency, Oreg., for 1910.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | Day. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | 16 | 0.20 | | | | | |
| 2 | 0.70 | | | 1.10 | | | 17 | | | | | | |
| 3 | | | | | | | 18 | | | | | | |
| 4 | | | | | | | 19 | | | | | | 0.0 |
| 5 | | | | | | | 20 | | 0.10 | 1.90 | | | |
| 6 | | 0.20 | 1.30 | | | 0.0 | 21 | | | | | | |
| 7 | | | | | | | 22 | | | | | 1.5 | |
| 8 | | | | | 0.27 | | 23 | .17 | | | | | |
| 9 | .60 | | | | | | 24 | | | | 0.35 | | |
| 10 | | | | 1.00 | | | 25 | | | | | | |
| 11 | | | | | | | 26 | | | | | | .0 |
| 12 | | | | | | .0 | 27 | | .10 | 1.60 | | | |
| 13 | | .15 | 2.20 | | | | 28 | | | | | | |
| 14 | | | | | | | 29 | | | | | .10 | |
| 15 | | | | | .20 | | 30 | .25 | | | .30 | | |
| | | | | | | | 31 | | | | | | |

[illegible]

| Day | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | | | | | | | | | | | | |
| 9 | | | | | [illegible] | [illegible] | [illegible] | [illegible] | | | 5.01 | |
| 10 | | | | | [illegible] | [illegible] | [illegible] | | | | 5.01 | |
| 11 | | | | | [illegible] | [illegible] | [illegible] | | | | 4.99 | |
| 12 | | | | | [illegible] | [illegible] | [illegible] | | | | 5.00 | |
| 13 | [illegible] | | | | [illegible] | [illegible] | [illegible] | | [illegible] | | 4.99 | [illegible] |
| 14 | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | 4.95 | [illegible] |
| 15 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | [illegible] |
| 16 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 5.64 | [illegible] | | | [illegible] |
| 18 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 19 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 20 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | [illegible] |
| 21 | [illegible] | | [illegible] | [illegible] | [illegible] | 4.75 | | 5.70 | | | | [illegible] |
| 22 | | | [illegible] | [illegible] | [illegible] | 4.75 | | 5.70 | | | | [illegible] |
| 23 | | | [illegible] | [illegible] | [illegible] | | | 5.70 | | | | [illegible] |
| 24 | | [illegible] | [illegible] | [illegible] | [illegible] | | | 5.70 | | | | [illegible] |
| 25 | | | [illegible] | [illegible] | [illegible] | | | 5.44 | 4.84 | 4.85 | | [illegible] |
| 26 | | | [illegible] | [illegible] | [illegible] | | 5.54 | 5.34 | 4.82 | 4.98 | | [illegible] |
| 27 | | | 4.42 | [illegible] | [illegible] | | 5.56 | 5.26 | 4.81 | 5.01 | | [illegible] |
| 28 | | | [illegible] | [illegible] | [illegible] | | 5.48 | 5.20 | 4.84 | 5.01 | | |
| 29 | | | | [illegible] | | 5.65 | 5.30 | | 4.84 | 5.01 | | |
| 30 | | | | [illegible] | | 5.65 | 5.32 | | 4.84 | 5.02 | 4.80 | |
| 31 | | | | | | 5.50 | | 5.29 | | 5.02 | 4.80 | |

*Daily gage height, in feet, of Lost River near Clear Lake, Cal., for 1904–1909*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1908–9. | | | | | | | | | |
| 1 | | 5.16 | 5.18 | 5.32 | 6.09 | | 6.94 | | 5.72 |
| 2 | | 5.16 | 5.17 | 5.35 | 6.10 | | 7.00 | | 5.61 |
| 3 | | 5.15 | 5.16 | 5.36 | 6.08 | | 6.98 | 6.09 | 5.52 |
| 4 | 5.20 | 5.15 | 5.16 | 5.60 | 5.76 | 7.33 | | 6.04 | 5.43 |
| 5 | 5.20 | 5.15 | 5.16 | 5.70 | 5.68 | 7.36 | | 5.96 | 5.36 |
| 6 | 5.20 | 5.14 | 5.16 | 5.65 | 5.68 | 7.38 | | 5.91 | 5.26 |
| 7 | 5.19 | 5.14 | 5.14 | 6.14 | 6.20 | 7.14 | | 5.88 | 5.21 |
| 8 | 5.20 | 5.14 | 5.14 | 6.10 | 6.20 | 7.10 | | 5.86 | 5.16 |
| 9 | 5.20 | | 5.14 | 6.50 | 6.20 | 6.80 | | | 5.12 |
| 10 | 5.21 | | 5.14 | 6.60 | 6.20 | 6.76 | | 5.89 | 5.07 |
| 11 | 5.25 | | 5.14 | | 6.20 | 6.78 | 7.00 | 5.87 | 4.91 |
| 12 | 5.30 | | 5.13 | | 6.25 | 6.80 | 7.01 | | 4.69 |
| 13 | 5.35 | | 5.16 | | | | 7.01 | | |
| 14 | 5.40 | | 5.16 | | | 6.68 | 7.03 | | |
| 15 | 5.45 | 5.18 | 5.16 | | | 6.72 | 7.04 | | |
| 16 | 5.55 | 5.18 | 5.16 | 7.31 | | 6.86 | 7.06 | 5.65 | |
| 17 | 5.60 | 5.17 | | 7.42 | | 6.91 | 7.07 | 5.63 | |
| 18 | 5.60 | 5.16 | | 7.46 | | 6.84 | | 5.62 | |
| 19 | 5.40 | 5.17 | | 7.60 | | 7.00 | | 5.58 | |
| 20 | 5.25 | 5.22 | 5.16 | 7.62 | | 6.90 | | 5.55 | |
| 21 | 5.24 | 5.25 | 5.16 | | | 6.92 | | 5.55 | |
| 22 | 5.20 | 5.26 | 5.16 | | | 6.90 | | 5.53 | |
| 23 | 5.14 | 5.29 | 5.16 | | | 6.94 | | 5.53 | |
| 24 | 5.14 | 5.26 | 5.16 | 7.40 | | 6.86 | | 5.58 | |
| 25 | 5.14 | 5.25 | 5.16 | 7.39 | | 6.83 | | 5.59 | |
| 26 | 5.14 | 5.22 | 5.16 | 7.39 | | 6.85 | | 5.53 | |
| 27 | 5.13 | 5.22 | 5.18 | 7.39 | | 6.90 | | 5.63 | |
| 28 | 5.13 | 5.22 | 5.20 | 7.38 | | 6.94 | | 5.63 | |
| 29 | 5.14 | 5.18 | 5.23 | 6.00 | | 6.86 | | 5.74 | |
| 30 | 5.15 | 5.18 | 5.26 | 6.06 | | 6.82 | | 5.89 | |
| 31 | 5.16 | | 5.29 | 6.10 | | 6.84 | | 5.83 | |

*Rating tables for Lost River near Clear Lake, Cal.*

**September 4, 1904, to December 31, 1905.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 4.90 | 6 | 5.70 | 66 | 6.50 | 238 | 7.30 | 508 |
| 5.00 | 9 | 5.80 | 81 | 6.60 | 268 | 7.40 | 545 |
| 5.10 | 12 | 5.90 | 98 | 6.70 | 300 | 7.50 | 582 |
| 5.20 | 17 | 6.00 | 117 | 6.80 | 332 | 7.60 | 619 |
| 5.30 | 23 | 6.10 | 138 | 6.90 | 365 | 7.70 | 657 |
| 5.40 | 31 | 6.20 | 160 | 7.00 | 400 | 7.80 | 695 |
| 5.50 | 41 | 6.30 | 184 | 7.10 | 436 | 7.90 | 733 |
| 5.60 | 53 | 6.40 | 210 | 7.20 | 472 | 8.00 | 772 |

NOTE.—The above table is based on 16 discharge measurements made during 1904–5 and is fairly well defined.

**January 1 to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5.00 | 5 | 6.00 | 98 | 7.00 | 392 | 8.00 | 865 |
| 5.10 | 8 | 6.10 | 118 | 7.10 | 432 | 8.20 | 980 |
| 5.20 | 12 | 6.20 | 140 | 7.20 | 474 | 8.40 | 1,100 |
| 5.30 | 17 | 6.30 | 164 | 7.30 | 518 | 8.60 | 1,230 |
| 5.40 | 23 | 6.40 | 191 | 7.40 | 562 | 8.80 | 1,360 |
| 5.50 | 30 | 6.50 | 220 | 7.50 | 608 | 9.00 | 1,500 |
| 5.60 | 40 | 6.60 | 252 | 7.60 | 654 | 9.20 | 1,640 |
| 5.70 | 52 | 6.70 | 286 | 7.70 | 702 | 9.40 | 1,785 |
| 5.80 | 66 | 6.80 | 320 | 7.80 | 755 | | |
| 5.90 | 81 | 6.90 | 356 | 7.90 | 810 | | |

NOTE.—Table is based on 15 discharge measurements made during 1906 and is well defined between gage heights 5.2 feet and 9.1 feet.

[illegible]

[illegible]

[illegible]

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | feet | | feet | | feet | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible] channel. [illegible] defined.

[illegible]

[illegible] channel [illegible] adjustments and is fairly well defined.

[illegible]

[illegible] channel. [illegible]

[illegible]

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible] discharges are based is fairly well defined. Discharges for [illegible] are obtained from hydrographs or by interpolation.

*Monthly discharge of Lost River near Clear Lake, Cal., for 1904–1909.*

[Drainage area, 550 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1904.** | | | | | | | |
| September | 20 | 9 | 11.3 | 0.020 | 0.02 | 673 | |
| **1904–5.** | | | | | | | |
| October | 23 | 12 | 18.1 | .033 | .04 | 1,113 | |
| November | 17 | 12 | 15.5 | .028 | .03 | 923 | |
| December | 27 | 14 | 18.2 | .033 | .04 | 1,119 | |
| January | 332 | 31 | 120 | .218 | .25 | 7,379 | |
| February | 695 | 17 | 217 | .395 | .41 | 12,050 | |
| March | 365 | 117 | 224 | .407 | .47 | 13,770 | |
| April | 582 | 23 | 127 | .231 | .26 | 7,557 | |
| May | 31 | 6 | 14.6 | .027 | .03 | 898 | |
| June | 98 | 9 | 21.6 | .039 | .04 | 1,286 | |
| July | ........ | ........ | 7 | .013 | .02 | 430 | |
| August | ........ | ........ | 6 | .011 | .01 | 369 | |
| September | ........ | ........ | 7 | .013 | .01 | 417 | |
| The year | 695 | ........ | 66.3 | .121 | 1.61 | 46,300 | |
| **1905–6.** | | | | | | | |
| October | ........ | ........ | 10 | .018 | .02 | 615 | |
| November | 17 | 12 | 13 | .024 | .03 | 774 | |
| December | 12 | 14 | 16 | .029 | .03 | 984 | |
| January | 35 | 12 | 23.6 | .043 | .05 | 1,450 | |
| February | 356 | 30 | 106 | .193 | .20 | 5,890 | |
| March | 1,710 | 129 | 797 | 1.45 | 1.67 | 49,000 | |
| April | 1,780 | 392 | 1,150 | 2.09 | 2.33 | 68,400 | |
| May | 374 | 98 | 177 | .322 | .37 | 10,900 | |
| June | 252 | 17 | 99.2 | .180 | .20 | 5,900 | |
| July | 17 | 5 | 9.4 | .017 | .02 | 578 | |
| August | 8 | 8 | 8.0 | .015 | .02 | 492 | |
| September | 12 | 8 | 10.4 | .019 | .02 | 619 | |
| The year | 1,780 | 5 | 202 | .367 | 4.96 | 146,000 | |
| **1906–7.** | | | | | | | |
| October | 12 | 12 | 12 | .022 | .03 | 738 | |
| November | 17 | 12 | 16.5 | .030 | .03 | 982 | |
| December | 540 | 17 | 127 | .231 | .27 | 7,810 | |
| January | 608 | 43 | 267 | .485 | .56 | 16,400 | B. |
| February | 3,020 | 540 | 1,140 | 2.07 | 2.16 | 63,300 | A. |
| March | 2,560 | 608 | 1,360 | 2.47 | 2.85 | 83,600 | A. |
| April | 1,840 | 332 | 1,070 | 1.94 | 2.16 | 63,700 | A. |
| May | 292 | 90 | 191 | .347 | .40 | 11,700 | B. |
| June | 143 | 24 | 54.9 | .100 | .11 | 3,270 | B. |
| July | 18 | 9 | 13.0 | .024 | .03 | 799 | B. |
| August | 17 | 6 | 11.9 | .022 | .03 | 732 | B. |
| September | 14 | 7 | 9.63 | .018 | .02 | 573 | B. |
| The year | 3,020 | 6 | 356 | .647 | 8.65 | 254,000 | |
| **1907–8.** | | | | | | | |
| October | 24 | 14 | 16.8 | .030 | .03 | 1,030 | B. |
| November | 28 | 17 | 22.1 | .040 | .04 | 1,320 | B. |
| December | 352 | 16 | 84.6 | .157 | .18 | 5,200 | B. |
| January | 392 | 98 | 205 | .373 | .43 | 12,600 | B. |
| February | 108 | 36 | 57.1 | .104 | .11 | 3,280 | B. |
| March | 356 | 31 | 177 | .322 | .37 | 10,900 | B. |
| April | 66 | 19.6 | 43.9 | .080 | .09 | 2,610 | B. |
| May | 52 | 13.6 | 28.9 | .053 | .06 | 1,780 | B. |
| June | 16.7 | 4.6 | 9.10 | .017 | .02 | 541 | B. |
| July | 8.1 | 5.0 | 6.08 | .011 | .01 | 374 | B. |
| August | 8.1 | 2.5 | 5.82 | .011 | .01 | 358 | D. |
| September | 10 | 2.5 | 6.48 | .012 | .01 | 386 | B. |
| The year | 392 | 2.5 | 55.2 | .101 | 1.36 | 40,400 | |
| **1908–9.** | | | | | | | |
| October | 29 | 7.7 | 12.0 | .022 | .03 | 738 | B. |
| November | 12.6 | 7.9 | 9.13 | .017 | .02 | 543 | B. |
| December | 12.6 | 7.7 | 8.66 | .016 | .02 | 532 | B. |
| January | 771 | 14 | 370 | .673 | .78 | 22,800 | C. |
| February | 620 | 36 | 335 | .609 | .63 | 18,600 | C. |
| March | 630 | 233 | 437 | .795 | .92 | 26,900 | C. |
| April | 468 | 150 | 396 | .720 | .80 | 23,600 | C. |
| May | 160 | 24 | 68.9 | .125 | .14 | 4,240 | D. |
| June 1-12 | 56 | 2 | 16 | .029 | .01 | 381 | D. |
| The period | ........ | ........ | ........ | ........ | ........ | 98,300 | |

## [illegible]

[illegible] station was originally established May [illegible], 190[illegible], [illegible] bridge at Olene, in sec. [illegible], T. 39 S., R. [illegible] E., and was maintained [illegible] of that year, when the bridge at which measurements were made was destroyed and the station was discontinued. It was reestablished May [illegible], 1907, and the records have been continuous since that date. This station measures the flow at Merrill, [illegible] a sufficient length of time to make a comparison between the two. The difference of flow is [illegible] accounted for by [illegible] the canal [illegible] at Merrill station.

[illegible] connecting Lost River with Klamath River [illegible] Lost River [illegible] miles below the Olene station and Klamath River [illegible] miles [illegible] Lake [illegible]. Through this slough it is proposed to [illegible] part of the water from Lost River into Klamath River, and thus [illegible] Tule Lake. At present, however, the slough [illegible] and the flow has been shut off for several years. [illegible] water flowed except during high water, [illegible] depending upon whether Klamath or Lost River was the [illegible].

[illegible] small amount of inflow below Olene. One spring was [illegible] giving a discharge of [illegible] second-feet, and [illegible] there is probably some waste water from [illegible] is situated half a mile from the left bank of [illegible] below Olene. [illegible] has no surface outlet except at [illegible] it is possible that a little water passes underground [illegible] during the summer months.

[illegible] since April [illegible], 190[illegible], in order to insure [illegible] the datum having remained the same.

[illegible] made from the highway bridge to which the gage [illegible] by wading. In determining the discharge [illegible] measurements have been given greater weight than [illegible] at the [illegible].

[illegible] maintained since January 1, 1910, by the [illegible] of daily and [illegible] United States Geological [illegible].

*Discharge measurements of Lost River at Olene, Oreg., in 1904-1911.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-feet.* | 1908. | | *Feet.* | *Sec.-feet.* |
| May 23 | Landes and Lewis | 5.8 | 961 | Mar. 17 | C. E. Ellsworth | 7.00 | 1,690 |
| June 10 | .....do | 4.9 | 322 | 20 | .....do | 6.30 | 1,120 |
| | | | | Apr. 10 | .....do | 4.95 | 238 |
| 1907. | | | | 14 | .....do | 4.87 | 205 |
| May 20 | Stevens and Ellsworth | 5.20 | 349 | 22 | .....do | 4.75 | 168 |
| 31 | C. E. Ellsworth | 5.05 | 256 | May 1 | Ellsworth and Kimble | 4.70 | 155 |
| June 7 | .....do | 4.90 | 220 | 13 | H. Kimble | 4.65 | 127 |
| 14 | .....do | 4.88 | 173 | June 11 | .....do | 4.60 | 112 |
| 18 | .....do | 5.03 | 257 | 27 | .....do | 4.60 | 122 |
| 20 | .....do | 5.05 | 256 | July 23 | .....do | 4.50 | 125 |
| 24 | .....do | 4.98 | 222 | Sept. 5 | .....do | 4.50 | 108 |
| 28 | .....do | 4.85 | 184 | Oct. 24 | .....do | 4.60 | 97 |
| July 2 | .....do | 4.80 | 145 | Nov. 23 | Kimble and McGlashan | 4.63 | 109 |
| 6 | .....do | 4.75 | 131 | | | | |
| 24 | .....do | 4.65 | 132 | 1909. | | | |
| 27 | .....do | 4.65 | 130 | Feb. 26 | Howard Kimble | 6.30 | 1,070 |
| Aug. 1 | .....do | 4.58 | 106 | Mar. 6 | .....do | 7.40 | 2,000 |
| 9 | .....do | 4.60 | 122 | May 25 | A. E. Geiger | 4.71 | 191 |
| 13 | .....do | 4.62 | 130 | July 10 | .....do | 4.49 | 34 |
| 15 | .....do | 4.60 | 116 | Sept. 19 | John Yadon | 4.47 | 95 |
| 22 | .....do | 4.60 | 117 | 25 | .....do | 4.50 | 112 |
| Sept. 5 | .....do | 4.62 | 129 | Oct. 15 | .....do | 4.52 | 145 |
| 18 | .....do | 4.62 | 126 | 22 | .....do | 4.52 | 105 |
| 23 | .....do | 4.62 | 118 | Nov. 23 | .....do | 7.36 | 1,720 |
| 26 | .....do | 4.62 | 128 | | | | |
| Oct. 1 | .....do | 4.63 | 124 | 1910. | | | |
| 8 | .....do | 4.63 | 118 | Aug. 3 | Leland Moser | 4.45 | 90 |
| 16 | .....do | 4.63 | 129 | Sept. 19 | .....do | 4.53 | 124 |
| Nov. 6 | .....do | 4.70 | 148 | Dec. 7 | .....do | 5.36 | 441 |
| 9 | .....do | 4.70 | 146 | 12 | .....do | 8.22 | 2,610 |
| 16 | .....do | 4.68 | 134 | 13 | .....do | 7.22 | 1,620 |
| 1908. | | | | 1911. | | | |
| Feb. 15 | C. E. Ellsworth | 4.82 | 186 | Mar. 28 | Leland Moser | 7.43 | 2,240 |
| 19 | .....do | 4.82 | 176 | 28 | .....do | 7.35 | 2,100 |
| 26 | .....do | 4.75 | 173 | Apr. 17 | .....do | 5.51 | 565 |
| Mar. 16 | .....do | 6.15 | 958 | | | | |

*Daily gage height, in feet, of Lost River at Olene, Oreg., for 1907-1912.*

| Day. | May. | June. | July. | Aug. | Sept. | Day. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1907. | | | | | | 1907. | | | | | |
| 1 | ........ | 5.15 | 4.80 | 4.55 | 4.60 | 16 | ........ | 5.00 | 4.70 | 4.50 | 4.60 |
| 2 | ........ | 5.15 | 4.80 | 4.55 | 4.60 | 17 | ........ | 5.00 | 4.70 | 4.50 | 4.60 |
| 3 | ........ | 5.15 | 4.80 | 4.55 | 4.60 | 18 | ........ | 4.98 | 4.70 | 4.50 | 4.60 |
| 4 | ........ | 5.15 | 4.80 | 4.55 | 4.60 | 19 | 5.20 | 5.05 | 4.70 | 4.50 | 4.60 |
| 5 | ........ | 5.10 | 4.80 | 4.55 | 4.60 | 20 | 5.20 | 5.05 | 4.70 | 4.50 | 4.60 |
| 6 | ........ | 5.05 | 4.75 | 4.55 | 4.60 | 21 | 5.20 | 5.05 | 4.70 | 4.60 | 4.60 |
| 7 | ........ | 4.55 | 4.75 | 4.55 | 4.60 | 22 | 5.20 | 5.05 | 4.60 | 4.60 | 4.60 |
| 8 | ........ | 4.80 | 4.75 | 4.55 | 4.60 | 23 | 5.25 | 5.05 | 4.60 | 4.60 | 4.60 |
| 9 | ........ | 4.80 | 4.75 | 4.60 | 4.60 | 24 | 5.22 | 5.00 | 4.60 | 4.60 | 4.60 |
| 10 | ........ | 4.70 | 4.75 | 4.60 | 4.60 | 25 | 5.25 | 4.95 | 4.60 | 4.60 | 4.62 |
| 11 | ........ | 4.60 | 4.75 | 4.60 | 4.60 | 26 | 5.25 | 4.95 | 4.60 | 4.60 | 4.62 |
| 12 | ........ | 4.60 | 4.75 | 4.60 | 4.60 | 27 | 5.25 | 4.90 | 4.60 | 4.60 | 4.62 |
| 13 | ........ | 4.80 | 4.70 | 4.58 | 4.60 | 28 | 5.22 | 4.90 | 4.60 | 4.60 | 4.62 |
| 14 | ........ | 4.85 | 4.70 | 4.55 | 4.60 | 29 | 5.22 | 4.85 | 4.60 | 4.60 | 4.62 |
| 15 | ........ | 4.90 | 4.70 | 4.55 | 4.60 | 30 | 5.15 | 4.85 | 4.60 | 4.60 | 4.62 |
| | | | | | | 31 | 5.15 | ........ | 4.60 | 4.60 | ........ |

*Daily gage height, in feet, of Lost River at Olene, Oreg., for 1907–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 4.51 | 4.51 | 5.32 | 4.52 | 5.15 | 7.04 | 5.16 | 4.57 | 4.50 | ...... | 4.45 | 4.47 |
| 2 | 4.51 | 4.51 | 5.30 | 4.50 | 5.10 | 9.08 | 5.14 | 4.57 | 4.49 | ...... | 4.45 | 4.47 |
| 3 | 4.52 | 4.52 | 5.30 | 4.48 | 5.00 | 9.73 | 5.11 | 4.58 | 4.49 | 4.44 | 4.45 | 4.47 |
| 4 | 4.52 | 4.51 | 5.25 | 4.46 | 4.88 | 9.38 | ...... | 4.59 | 4.49 | 4.44 | 4.45 | 4.47 |
| 5 | 4.53 | 4.50 | 5.25 | 4.45 | 4.70 | 8.46 | 5.18 | 4.60 | 4.48 | 4.44 | 4.42 | 4.47 |
| 6 | 4.54 | 4.50 | 5.15 | 4.44 | 4.60 | 7.66 | 5.04 | 4.62 | 4.48 | 4.44 | 4.35 | 4.47 |
| 7 | 4.55 | 4.50 | 4.90 | 4.42 | 4.62 | 7.12 | 4.98 | 4.66 | 4.48 | 4.44 | 4.35 | 4.47 |
| 8 | 4.55 | 4.50 | 4.82 | 4.42 | 4.66 | 6.77 | 4.93 | 4.69 | 4.48 | 4.44 | 4.35 | 4.47 |
| 9 | 4.55 | 4.50 | 4.80 | 4.41 | 4.64 | 6.53 | 4.90 | 4.68 | 4.48 | 4.44 | 4.37 | 4.47 |
| 10 | 4.56 | 4.50 | 4.74 | 4.40 | 4.64 | 6.46 | 4.87 | 4.66 | 4.48 | 4.42 | 4.38 | 4.47 |
| 11 | 4.56 | 4.50 | 4.70 | 4.40 | 4.65 | 6.42 | 4.84 | 4.64 | 4.48 | 4.42 | 4.40 | 4.47 |
| 12 | 4.56 | 4.50 | 4.72 | 4.40 | 4.64 | 6.40 | 4.82 | 4.64 | 4.48 | 4.42 | 4.40 | 4.48 |
| 13 | 4.56 | 4.50 | 4.72 | 4.40 | 4.68 | 6.38 | 4.80 | 4.60 | 4.48 | 4.42 | 4.40 | 4.53 |
| 14 | 4.56 | 4.50 | 4.72 | 4.40 | 4.89 | 6.50 | 4.77 | 4.46 | 4.48 | 4.42 | 4.40 | 4.59 |
| 15 | 4.56 | 4.50 | 4.72 | 4.40 | 5.06 | 6.50 | 4.74 | 4.44 | 4.48 | 4.42 | 4.41 | 4.58 |
| 16 | 4.56 | 4.50 | 4.72 | 4.40 | 5.01 | 6.44 | 4.74 | 4.43 | 4.48 | 4.42 | 4.43 | 4.56 |
| 17 | 4.56 | 4.50 | 4.70 | 4.40 | 4.92 | 6.34 | 4.72 | 4.50 | 4.48 | 4.42 | 4.44 | 4.52 |
| 18 | 4.56 | 4.53 | 4.69 | 4.40 | 5.01 | 6.28 | 4.70 | 4.51 | 4.48 | 4.42 | 4.44 | 4.52 |
| 19 | 4.56 | 4.54 | 4.69 | 4.39 | 5.06 | 6.22 | 4.68 | 4.51 | 4.48 | 4.42 | 4.44 | 4.52 |
| 20 | 4.55 | 4.57 | 4.69 | 4.39 | 5.02 | 6.30 | 4.66 | 4.51 | 4.48 | 4.42 | 4.44 | 4.52 |
| 21 | 4.55 | 4.57 | 4.69 | 4.52 | 5.05 | 6.29 | 4.65 | 4.51 | 4.48 | 4.42 | 4.44 | 4.52 |
| 22 | 4.55 | 6.18 | 4.69 | 4.59 | 5.02 | 6.10 | 4.63 | 4.51 | 4.48 | 4.42 | 4.44 | 4.52 |
| 23 | 4.54 | 7.33 | 4.69 | 4.88 | 4.95 | 5.94 | 4.61 | 4.51 | 4.47 | 4.42 | 4.45 | 4.51 |
| 24 | 4.53 | 7.86 | 4.68 | 5.48 | 5.31 | 6.02 | 4.60 | 4.42 | 4.47 | 4.43 | 4.47 | 4.51 |
| 25 | 4.53 | 8.76 | 4.68 | 6.85 | 6.04 | 6.04 | 4.60 | 4.46 | 4.47 | 4.44 | 4.47 | 4.51 |
| 26 | 4.52 | 6.76 | 4.60 | 5.95 | 6.11 | 5.88 | 4.59 | 4.50 | 4.47 | 4.44 | 4.47 | 4.51 |
| 27 | 4.52 | 6.25 | 4.56 | 5.80 | 6.11 | 5.73 | 4.58 | 4.52 | 4.46 | 4.44 | 4.47 | 4.51 |
| 28 | 4.51 | 5.70 | 4.55 | 5.52 | 6.22 | 5.58 | 4.57 | 4.52 | 4.45 | 4.44 | 4.47 | 4.51 |
| 29 | 4.51 | 5.58 | 4.54 | 5.38 | ...... | 5.42 | 4.56 | 4.52 | 4.44 | 4.45 | 4.47 | 4.50 |
| 30 | 4.51 | 5.40 | 4.53 | 5.31 | ...... | 5.28 | 4.58 | 4.52 | 4.44 | 4.45 | 4.47 | 4.50 |
| 31 | 4.51 | ...... | 4.52 | 5.24 | ...... | 5.21 | ...... | 4.52 | ...... | 4.40 | 4.47 | ...... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 4.50 | 4.51 | 4.77 | 4.60 | 4.62 | 4.55 | 7.70 | 5.45 | 4.58 | 4.50 | 4.45 | 4.56 |
| 2 | 4.50 | 4.51 | 4.98 | 4.58 | 4.62 | 4.54 | 7.70 | 5.08 | 4.57 | 4.50 | 4.46 | 4.52 |
| 3 | 4.50 | 4.51 | 5.02 | 4.58 | 4.62 | 4.54 | 7.60 | 4.94 | 4.57 | 4.50 | 4.45 | 4.50 |
| 4 | 4.50 | 4.51 | 5.74 | 4.56 | 4.62 | 4.56 | 7.10 | 4.92 | 4.57 | 4.50 | 4.45 | 4.50 |
| 5 | 4.50 | 4.51 | 6.22 | 4.55 | 4.65 | 4.64 | 6.70 | 4.90 | 4.57 | 4.50 | 4.45 | 4.50 |
| 6 | 4.50 | 4.51 | 5.62 | 4.55 | 4.77 | 4.82 | 6.50 | 4.88 | 4.57 | 4.50 | 4.45 | 4.50 |
| 7 | 4.50 | 4.51 | 5.36 | 4.55 | 4.88 | 5.27 | 7.20 | 4.87 | 4.56 | 4.50 | 4.45 | 4.50 |
| 8 | 4.50 | 4.52 | 5.39 | 4.55 | 4.89 | 5.85 | 7.20 | 4.88 | 4.56 | 4.50 | 4.45 | 4.51 |
| 9 | 4.50 | 4.52 | 5.36 | 4.54 | 4.68 | 5.60 | 6.60 | 4.88 | 4.58 | 4.50 | 4.45 | 4.51 |
| 10 | 4.50 | 4.52 | 6.17 | 4.54 | 4.70 | 5.70 | 6.30 | 4.85 | 4.60 | 4.48 | 4.45 | 4.51 |
| 11 | 4.50 | 4.52 | 7.52 | 4.55 | 4.70 | 5.70 | 6.20 | 4.82 | 4.60 | 4.47 | 4.45 | 4.51 |
| 12 | 4.50 | 4.52 | 8.73 | 4.55 | 4.70 | 5.55 | 5.80 | 4.78 | 4.61 | 4.44 | 4.45 | 4.51 |
| 13 | 4.50 | ...... | 7.02 | 4.55 | 4.70 | 5.55 | 5.65 | 4.77 | 4.62 | 4.43 | 4.45 | 4.51 |
| 14 | 4.50 | ...... | 6.02 | 4.55 | 4.72 | 5.55 | 5.60 | 4.76 | 4.61 | 4.43 | 4.43 | 4.51 |
| 15 | 4.50 | ...... | 5.22 | 4.55 | 4.74 | 5.65 | 5.55 | 4.74 | 4.60 | 4.43 | 4.43 | 4.51 |
| 16 | 4.50 | ...... | 5.22 | 4.55 | 4.77 | 5.75 | 5.48 | 4.70 | 4.60 | 4.44 | 4.43 | 4.51 |
| 17 | 4.50 | ...... | 5.10 | 4.54 | 4.80 | 5.70 | 5.48 | 4.69 | 4.60 | 4.44 | 4.43 | 4.51 |
| 18 | 4.50 | ...... | 4.98 | 4.54 | 4.72 | 5.90 | 5.60 | 4.69 | 4.40 | 4.44 | 4.43 | 4.51 |
| 19 | 4.50 | ...... | 4.90 | 4.55 | 4.66 | 6.20 | 5.65 | 4.69 | 4.29 | 4.44 | 4.44 | 4.51 |
| 20 | 4.50 | 4.52 | 4.84 | 4.56 | 4.62 | 6.40 | 5.50 | 4.69 | 4.33 | 4.45 | 4.45 | 4.51 |
| 21 | 4.51 | 4.53 | 4.74 | 4.56 | 4.57 | 7.40 | 5.37 | 4.70 | 4.40 | 4.45 | 4.45 | 4.51 |
| 22 | 4.51 | 4.53 | 4.72 | 4.57 | 4.55 | 7.60 | 5.38 | 4.72 | 4.41 | 4.45 | 4.48 | 4.51 |
| 23 | 4.51 | 4.53 | 4.72 | 4.57 | 4.55 | 8.10 | 5.40 | 4.72 | 4.48 | 4.45 | 4.58 | 4.51 |
| 24 | 4.51 | 4.54 | 4.70 | 4.57 | 4.56 | 8.70 | 5.36 | 4.72 | 4.52 | 4.45 | 4.62 | 4.51 |
| 25 | 4.51 | 4.57 | 4.66 | 4.58 | 4.55 | 9.20 | 5.34 | 4.70 | 4.51 | 4.45 | 4.62 | 4.51 |
| 26 | 4.51 | 4.57 | 4.63 | 4.58 | 4.55 | 8.70 | 5.26 | 4.68 | 4.51 | 4.45 | 4.62 | 4.51 |
| 27 | 4.51 | 4.74 | 4.61 | 4.58 | 4.55 | 7.90 | 5.26 | 4.64 | 4.52 | 4.46 | 4.65 | 4.52 |
| 28 | 4.51 | 4.91 | 4.60 | 4.58 | 4.55 | 7.40 | 5.14 | 4.62 | 4.52 | 4.46 | 4.80 | 4.52 |
| 29 | 4.51 | 4.85 | 4.60 | 4.58 | ...... | 7.60 | 5.12 | 4.61 | 4.52 | 4.47 | 4.96 | 4.52 |
| 30 | 4.51 | 4.76 | 4.60 | 4.59 | ...... | 7.70 | 5.36 | 4.60 | 4.52 | 4.47 | 4.84 | 4.52 |
| 31 | 4.51 | ...... | 4.60 | 4.60 | ...... | 7.60 | ...... | 4.59 | ...... | 4.47 | 4.60 | ...... |

*Daily gage height, in feet, of Lost River at Olene, Oreg., for 1907–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | 1911–12. | | | | | | |
| 1 | 4.32 | 4.34 | 4.54 | 4.53 | 5.60 | 5.55 | 16 | 4.52 | 4.54 | 4.53 | 4.66 | 5.60 | 5.45 |
| 2 | 4.52 | 4.32 | 4.54 | 4.53 | 5.50 | 5.55 | 17 | 4.52 | 4.54 | 4.53 | 4.82 | 5.75 | ...... |
| 3 | 4.52 | 4.52 | 4.54 | 4.53 | 5.50 | 5.50 | 18 | 4.52 | 4.54 | 4.53 | 4.98 | 6.80 | ...... |
| 4 | 4.52 | 4.52 | 4.54 | 4.53 | 5.50 | 5.48 | 19 | 4.52 | 4.54 | 4.53 | 5.28 | 8.40 | ...... |
| 5 | 4.52 | 4.52 | 4.54 | 4.53 | 5.50 | 5.47 | 20 | 4.52 | 4.54 | 4.53 | 5.26 | 7.00 | ...... |
| 6 | 4.52 | 4.52 | 4.53 | 4.53 | 5.50 | 5.45 | 21 | 4.52 | 4.54 | 4.53 | 5.26 | 6.40 | ...... |
| 7 | 4.52 | 4.32 | 4.53 | 4.54 | 5.55 | 5.40 | 22 | 4.52 | 4.54 | 4.53 | 5.26 | 6.30 | ...... |
| 8 | 4.32 | 4.32 | 4.53 | 4.56 | 5.60 | 5.38 | 23 | 4.52 | 4.54 | 4.53 | 5.27 | 5.80 | ...... |
| 9 | 4.52 | 4.52 | 4.53 | 4.56 | 5.60 | 5.40 | 24 | 4.52 | 4.54 | 4.53 | 5.30 | 5.70 | ...... |
| 10 | 4.52 | 4.52 | 4.53 | 4.56 | 5.65 | 5.40 | 25 | 4.52 | 4.54 | 4.53 | 5.34 | 5.65 | ...... |
| 11 | 4.32 | 4.32 | 4.53 | 4.58 | 5.96 | 5.40 | 26 | 4.54 | 4.54 | 4.53 | 5.38 | 5.60 | ...... |
| 12 | 4.52 | 4.52 | 4.53 | 4.60 | 6.00 | 5.41 | 27 | 4.54 | 4.54 | 4.53 | 5.75 | 5.55 | ...... |
| 13 | 4.52 | 4.52 | 4.53 | 4.66 | 5.96 | 5.42 | 28 | 4.54 | 4.54 | 4.53 | 5.90 | 5.55 | ...... |
| 14 | 4.32 | 4.52 | 4.53 | 4.66 | 5.75 | 5.42 | 29 | 4.54 | 4.54 | 4.53 | 5.90 | 5.55 | ...... |
| 15 | 4.52 | 4.53 | 4.53 | 4.66 | 5.65 | 5.43 | 30 | 4.54 | 4.54 | 4.53 | 5.80 | ...... | ...... |
| | | | | | | | 31 | 4.54 | ...... | 4.53 | 5.70 | ...... | ...... |

*Rating table for Lost River at Olene, Oreg., May 19, 1907, to December 31, 1908.*

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* | *Feet.* | *Sec.-ft.* |
| 4.40 | 80 | 5.10 | 293 | 5.80 | 710 | 6.50 | 1,250 |
| 4.50 | 96 | 5.20 | 343 | 5.90 | 780 | 6.60 | 1,340 |
| 4.60 | 116 | 5.30 | 398 | 6.00 | 850 | 6.70 | 1,430 |
| 4.70 | 142 | 5.40 | 455 | 6.10 | 930 | 6.80 | 1,520 |
| 4.80 | 172 | 5.40 | 515 | 6.20 | 1,010 | 6.90 | 1,610 |
| 4.90 | 208 | 5.60 | 575 | 6.30 | 1,090 | 7.00 | 1,700 |
| 5.00 | 248 | 5.70 | 640 | 6.40 | 1,170 | | |

NOTE.—Table applicable only to open channel. It is based on 36 discharge measurements made in 1907 and 1908, and is fairly well defined between gage heights 4.6 feet and 7.0 feet.

*Daily discharge, in second-feet, of Lost River at Olene, Oreg., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 143 | 627 | 1,190 | 1,170 | 409 | 126 | 107 | 109 | 125 |
| 2 | 143 | 588 | 1,250 | 1,230 | 376 | 129 | 107 | 109 | 138 |
| 3 | 143 | 696 | 1,520 | 1,320 | 333 | 129 | 107 | 109 | 143 |
| 4 | 143 | 1,050 | 2,330 | 1,230 | 313 | 127 | 106 | 107 | 143 |
| 5 | 158 | 1,320 | 2,330 | 1,170 | 293 | 125 | 106 | 107 | 146 |
| 6 | 172 | 794 | 2,350 | 1,130 | 252 | 125 | 107 | 106 | 143 |
| 7 | 172 | 724 | 2,230 | 1,070 | 240 | 120 | 104 | 106 | 141 |
| 8 | 190 | 588 | 2,200 | 1,050 | 232 | 122 | 102 | 106 | 134 |
| 9 | 444 | 545 | 1,230 | 1,010 | 224 | 120 | 102 | 106 | 136 |
| 10 | 455 | 455 | 1,070 | 1,010 | 204 | 118 | 100 | 104 | 138 |
| 11 | 455 | 455 | 994 | 970 | 190 | 120 | 102 | 102 | 141 |
| 12 | 248 | 485 | 866 | 1,070 | 179 | 118 | 102 | 102 | 132 |
| 13 | 248 | 503 | 836 | 1,130 | 176 | 115 | 102 | 103 | 120 |
| 14 | 387 | 970 | 850 | 1,170 | 172 | 115 | 102 | 102 | 110 |
| 15 | 608 | 1,500 | 850 | 1,170 | 169 | 116 | 102 | 102 | 100 |
| 16 | 1,340 | 1,590 | 836 | 1,150 | 166 | 116 | 104 | 102 | 96 |
| 17 | 4,080 | 1,680 | 780 | 1,110 | 166 | 120 | 104 | 102 | 96 |
| 18 | 5,420 | 2,770 | 890 | 994 | 163 | 120 | 102 | 103 | 95 |
| 19 | 5,500 | 3,480 | 1,450 | 866 | 160 | 120 | 102 | 104 | 95 |
| 20 | 5,290 | 2,600 | 1,360 | 794 | 155 | 118 | 100 | 104 | 96 |
| 21 | 5,150 | 1,660 | 1,230 | 766 | 155 | 116 | 102 | 104 | 95 |
| 22 | 5,260 | 1,270 | 1,070 | 696 | 155 | 116 | 102 | 104 | 95 |
| 23 | 3,760 | 1,250 | 1,030 | 620 | 152 | 116 | 102 | 104 | 94 |
| 24 | 2,630 | 1,250 | 1,010 | 539 | 152 | 116 | 102 | 104 | 102 |
| 25 | 1,660 | 1,210 | 1,010 | 503 | 149 | 116 | 102 | 104 | 102 |
| 26 | 1,520 | 1,210 | 970 | 455 | 146 | 115 | 104 | 104 | 102 |
| 27 | 1,300 | 1,170 | 930 | 438 | 143 | 113 | 104 | 113 | 104 |
| 28 | 1,090 | 1,130 | 970 | 364 | 143 | 113 | 104 | 113 | 104 |
| 29 | 1,090 | ........ | 1,070 | 398 | 126 | 113 | 106 | 120 | 104 |
| 30 | 815 | ........ | 1,210 | 398 | 80 | 109 | 106 | 122 | 104 |
| 31 | 780 | ........ | 1,170 | ........ | 120 | ........ | 109 | 122 | ...... |

*Daily discharge, in second-feet, of Lost River at Olene, Oreg., for 1909-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909-10. | | | | | | | | | | | | |
| 1 | 104 | 104 | 400 | 106 | 322 | 1,480 | 328 | 115 | 102 | 91 | 93 | 97 |
| 2 | 104 | 104 | 398 | 102 | 296 | 3,350 | 317 | 115 | 100 | 91 | 93 | 97 |
| 3 | 106 | 106 | 398 | 98 | 248 | 3,860 | 300 | 116 | 100 | 91 | 93 | 97 |
| 4 | 106 | 104 | 370 | 95 | 301 | 3,640 | 320 | 118 | 100 | 91 | 93 | 97 |
| 5 | 107 | 102 | 370 | 93 | 143 | 2,840 | 339 | 120 | 98 | 91 | 86 | 97 |
| 6 | 109 | 102 | 318 | 91 | 120 | 2,160 | 267 | 125 | 98 | 91 | 78 | 97 |
| 7 | 111 | 102 | 208 | 98 | 125 | 1,730 | 240 | 134 | 98 | 91 | 78 | 97 |
| 8 | 111 | 102 | 179 | 98 | 134 | 1,450 | 220 | 141 | 98 | 91 | 78 | 97 |
| 9 | 111 | 102 | 172 | 96 | 129 | 1,270 | 208 | 138 | 98 | 91 | 80 | 97 |
| 10 | 113 | 102 | 155 | 94 | 129 | 1,220 | 197 | 134 | 98 | 88 | 84 | 97 |
| 11 | 113 | 102 | 143 | 94 | 132 | 1,190 | 186 | 129 | 98 | 88 | 84 | 97 |
| 12 | 113 | 102 | 149 | 94 | 129 | 1,180 | 179 | 129 | 98 | 88 | 84 | 98 |
| 13 | 113 | 102 | 149 | 94 | 138 | 1,160 | 172 | 120 | 98 | 88 | 84 | 107 |
| 14 | 113 | 102 | 149 | 94 | 204 | 1,250 | 163 | 95 | 98 | 88 | 84 | 118 |
| 15 | 113 | 102 | 149 | 94 | 276 | 1,250 | 155 | 91 | 98 | 88 | 86 | 116 |
| 16 | 113 | 102 | 149 | 94 | 253 | 1,300 | 155 | 89 | 98 | 88 | 89 | 113 |
| 17 | 113 | 102 | 143 | 94 | 216 | 1,130 | 149 | 102 | 98 | 88 | 91 | 106 |
| 18 | 113 | 107 | 141 | 94 | 253 | 1,180 | 143 | 104 | 98 | 88 | 91 | 106 |
| 19 | 113 | 109 | 141 | 92 | 276 | 1,040 | 138 | 104 | 98 | 88 | 91 | 106 |
| 20 | 111 | 115 | 141 | 92 | 257 | 1,100 | 134 | 104 | 98 | 88 | 91 | 106 |
| 21 | 111 | 115 | 141 | 106 | 272 | 1,090 | 132 | 104 | 98 | 88 | 91 | 106 |
| 22 | 111 | 994 | 141 | 118 | 257 | 950 | 127 | 104 | 98 | 88 | 91 | 106 |
| 23 | 109 | 2,000 | 141 | 201 | 228 | 838 | 122 | 104 | 97 | 88 | 93 | 104 |
| 24 | 107 | 2,510 | 138 | 327 | 416 | 894 | 120 | 88 | 97 | 89 | 97 | 104 |
| 25 | 107 | 3,450 | 138 | 1,510 | 908 | 908 | 120 | 96 | 97 | 91 | 97 | 104 |
| 26 | 106 | 1,480 | 120 | 945 | 958 | 798 | 118 | 102 | 97 | 91 | 97 | 104 |
| 27 | 106 | 1,060 | 113 | 740 | 958 | 691 | 116 | 106 | 95 | 91 | 97 | 104 |
| 28 | 104 | 640 | 111 | 553 | 1,040 | 592 | 115 | 106 | 93 | 91 | 97 | 104 |
| 29 | 104 | 563 | 109 | 462 | ...... | 488 | 113 | 106 | 91 | 93 | 97 | 102 |
| 30 | 104 | 465 | 107 | 418 | ...... | 398 | 118 | 106 | 91 | 93 | 97 | 102 |
| 31 | 104 | ...... | 106 | 374 | ...... | 356 | | 106 | | 94 | 97 | |
| 1910-11. | | | | | | | | | | | | |
| 1 | 102 | 104 | 163 | 126 | 131 | 114 | 2,200 | 308 | 121 | 102 | 91 | 116 |
| 2 | 102 | 104 | 240 | 121 | 131 | 112 | 2,200 | 287 | 119 | 102 | 93 | 107 |
| 3 | 102 | 104 | 257 | 121 | 131 | 112 | 2,110 | 227 | 119 | 102 | 91 | 102 |
| 4 | 102 | 104 | 686 | 116 | 131 | 116 | 1,710 | 220 | 119 | 102 | 91 | 102 |
| 5 | 102 | 104 | 1,040 | 114 | 139 | 136 | 1,400 | 212 | 119 | 102 | 91 | 102 |
| 6 | 102 | 104 | 618 | 114 | 172 | 186 | 1,250 | 208 | 119 | 102 | 91 | 102 |
| 7 | 102 | 104 | 449 | 114 | 206 | 392 | 1,790 | 202 | 116 | 102 | 91 | 102 |
| 8 | 102 | 106 | 468 | 114 | 209 | 775 | 1,790 | 206 | 116 | 102 | 91 | 104 |
| 9 | 102 | 106 | 449 | 112 | 147 | 605 | 1,320 | 208 | 121 | 102 | 91 | 104 |
| 10 | 102 | 106 | 1,000 | 112 | 152 | 670 | 1,100 | 196 | 126 | 98 | 91 | 104 |
| 11 | 102 | 106 | 2,050 | 114 | 152 | 670 | 1,020 | 198 | 128 | 95 | 91 | 104 |
| 12 | 102 | 106 | 3,070 | 114 | 152 | 572 | 740 | 174 | 129 | 89 | 91 | 104 |
| 13 | 102 | 106 | 1,650 | 114 | 152 | 572 | 638 | 172 | 131 | 87 | 91 | 104 |
| 14 | 102 | 106 | 894 | 114 | 158 | 572 | 605 | 169 | 129 | 87 | 87 | 104 |
| 15 | 102 | 106 | 302 | 114 | 163 | 638 | 572 | 163 | 128 | 87 | 87 | 104 |
| 16 | 102 | 106 | 302 | 114 | 172 | 705 | 527 | 152 | 128 | 89 | 87 | 104 |
| 17 | 102 | 106 | 296 | 112 | 180 | 670 | 527 | 149 | 128 | 89 | 87 | 104 |
| 18 | 102 | 106 | 240 | 112 | 158 | 810 | 605 | 149 | 90 | 89 | 87 | 104 |
| 19 | 102 | 106 | 208 | 114 | 142 | 1,020 | 638 | 149 | 88 | 89 | 89 | 104 |
| 20 | 102 | 106 | 186 | 116 | 131 | 1,190 | 540 | 149 | 86 | 91 | 91 | 104 |
| 21 | 104 | 106 | 155 | 116 | 119 | 1,950 | 456 | 152 | 90 | 91 | 91 | 104 |
| 22 | 104 | 106 | 149 | 119 | 114 | 2,110 | 462 | 158 | 92 | 91 | 98 | 104 |
| 23 | 104 | 106 | 149 | 119 | 114 | 2,540 | 475 | 158 | 98 | 91 | 121 | 104 |
| 24 | 104 | 109 | 143 | 119 | 116 | 3,040 | 449 | 158 | 107 | 91 | 131 | 104 |
| 25 | 104 | 115 | 134 | 121 | 114 | 3,480 | 436 | 152 | 104 | 91 | 131 | 104 |
| 26 | 104 | 115 | 127 | 121 | 114 | 3,040 | 398 | 147 | 104 | 91 | 131 | 104 |
| 27 | 104 | 155 | 122 | 121 | 114 | 2,360 | 386 | 136 | 107 | 93 | 139 | 107 |
| 28 | 104 | 212 | 120 | 121 | 114 | 1,950 | 318 | 131 | 107 | 93 | 180 | 107 |
| 29 | 104 | 190 | 120 | 121 | ...... | 2,110 | 307 | 129 | 107 | 93 | 235 | 107 |
| 30 | 104 | 160 | 120 | 124 | ...... | 2,200 | 449 | 126 | 107 | 93 | 193 | 107 |
| 31 | 104 | ...... | 120 | 126 | ...... | 2,110 | ...... | 124 | ...... | 93 | 126 | ...... |

*Daily discharge, in second-feet, of Lost River at Olene, Oreg., for 1909-12*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | 1911-12. | | | | | | |
| 1 | 107 | 112 | 112 | 109 | 605 | 572 | 16 | 107 | 112 | 109 | 142 | 606 | [illegible] |
| 2 | 107 | 107 | 112 | 109 | 540 | 572 | 17 | 107 | 112 | 109 | 186 | 705 | |
| 3 | 107 | 107 | 112 | 109 | 540 | 540 | 18 | 107 | 112 | 109 | 242 | 1,480 | |
| 4 | 107 | 107 | 112 | 109 | 540 | 527 | 19 | 107 | 112 | 109 | 398 | 2,790 | |
| 5 | 107 | 107 | 112 | 109 | 540 | 520 | 20 | 107 | 112 | 109 | 386 | 1,630 | |
| 6 | 107 | 107 | 109 | 109 | 540 | 508 | 21 | 107 | 112 | 109 | 386 | 1,180 | |
| 7 | 107 | 107 | 109 | 112 | 540 | 475 | 22 | 107 | 112 | 109 | 386 | 1,100 | |
| 8 | 107 | 107 | 109 | 116 | 605 | 462 | 23 | 107 | 112 | 109 | 392 | 740 | |
| 9 | 107 | 107 | 109 | 116 | 605 | 475 | 24 | 107 | 112 | 109 | 410 | 670 | |
| 10 | 107 | 107 | 109 | 116 | 638 | 475 | 25 | 107 | 112 | 109 | 436 | 638 | |
| 11 | 107 | 107 | 109 | 121 | 845 | 475 | 26 | 112 | 112 | 109 | 462 | 606 | |
| 12 | 107 | 107 | 109 | 126 | 880 | 462 | 27 | 112 | 112 | 109 | 705 | 572 | |
| 13 | 107 | 107 | 109 | 142 | 845 | 488 | 28 | 112 | 112 | 109 | 810 | 572 | |
| 14 | 107 | 107 | 109 | 142 | 705 | 488 | 29 | 112 | 112 | 109 | 810 | 572 | |
| 15 | 107 | 109 | 109 | 142 | 638 | 494 | 30 | 112 | 112 | 109 | 740 | | |
| | | | | | | | 31 | 112 | | 109 | 670 | | |

NOTE.—Daily discharge determined from rating curves applicable as follows: Jan. 1 to Dec. 31, 1909, fairly well defined between 120 and 1,700 second-feet; Jan. 1 to Dec. 31, 1910, fairly well defined between 100 and 2,500 second-feet; Jan. 1 to Mar. 16, 1912, fairly well defined between 70 and 3,000 second-feet.

*Monthly discharge of Lost River at Olene, Oreg., for 1907-1912.*

[Drainage area, 1,290 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1907.** | | | | | | | |
| May 19-31 | 370 | 318 | 350 | 0.271 | 0.13 | 9,020 | B. |
| June | 318 | 116 | 227 | .176 | .20 | 13,500 | B. |
| July | 172 | 116 | 142 | .110 | .13 | 8,730 | B. |
| August | 116 | 96 | 109 | .084 | .10 | 6,700 | B. |
| September | 121 | 116 | 117 | .091 | .10 | 6,960 | B. |
| The period | | | | | | 44,900 | |
| **1907-8.** | | | | | | | |
| October | 142 | 121 | 128 | .099 | .11 | 7,870 | B. |
| November | 142 | 129 | 140 | .109 | .12 | 8,330 | B. |
| December | 780 | 100 | 216 | .167 | .19 | 13,300 | B. |
| January | 1,300 | 208 | 494 | .383 | .44 | 30,400 | B. |
| February | 343 | 157 | 221 | .171 | .18 | 12,700 | B. |
| March | 1,630 | 228 | 592 | .459 | .53 | 36,400 | B. |
| April | 387 | 142 | 214 | .166 | .19 | 12,700 | B. |
| May | 208 | 100 | 144 | .112 | .13 | 8,850 | B. |
| June | 172 | 93 | 126 | .098 | .11 | 7,500 | B. |
| July | 96 | 96 | 96.0 | .077 | .09 | 5,900 | B. |
| August | 106 | 96 | 101 | .078 | .09 | 6,210 | B. |
| September | 96 | 96 | 96.0 | .077 | .09 | 5,710 | B |
| The year | 1,630 | 93 | 214 | .166 | 2.27 | 156,000 | |
| **1908-9.** | | | | | | | |
| October | 116 | 93 | 110 | .085 | .10 | 6,760 | B. |
| November | 157 | 116 | 141 | .109 | .12 | 8,390 | B. |
| December | 157 | 142 | 146 | .113 | .13 | 8,980 | B. |
| January | 5,500 | 143 | 1,640 | 1.27 | 1.46 | 101,000 | A. |
| February | 3,480 | 455 | 1,200 | .930 | .97 | 66,000 | A. |
| March | 2,350 | 780 | 1,260 | .977 | 1.13 | 77,500 | A. |
| April | 1,320 | 364 | 900 | .698 | .78 | 53,600 | B |
| May | 409 | 80 | 197 | .153 | .18 | 12,100 | B. |
| June | 129 | 102 | 119 | .092 | .10 | 7,080 | B |
| July | 109 | 102 | 104 | .080 | .09 | 6,400 | B. |
| August | 122 | 102 | 107 | .083 | .10 | 6,580 | B |
| September | 146 | 95 | 116 | .090 | .10 | 6,900 | B |
| The year | 5,500 | 93 | 503 | .390 | 5.26 | 362,000 | |

*Monthly discharge of Lost River at Olene, Oreg., for 1907–1912*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1909–10.** *a* | | | | | | | |
| October | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| July | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| September | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | 78 | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1910–11.** | | | | | | | |
| October | 104 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | [illegible] | [illegible] | 16 | [illegible] | [illegible] | [illegible] | [illegible] |
| December | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| January | [illegible] | [illegible] | 17 | [illegible] | [illegible] | [illegible] | [illegible] |
| February | [illegible] | 114 | 14 | [illegible] | [illegible] | [illegible] | [illegible] |
| March | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| April | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| June | 151 | [illegible] | 16 | [illegible] | [illegible] | [illegible] | [illegible] |
| July | 102 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| August | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| September | 116 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| The year | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| **1911–12.** | | | | | | | |
| October | 112 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| November | 112 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| December | 112 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| January | 410 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| February | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| March 1-16 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| The period | | | | | | [illegible] | |

*a* Area includes area above Clear [illegible] no water was allowed to escape during [illegible]

## LOST RIVER AT [illegible]

This station, which is [illegible] S., R. 10 E., one-fourth mile [illegible] miles below Olene, was [illegible] place of the station formerly maintained at Olene.

The gage is a [illegible] which the discharge measurements are made [illegible] posed of clean sand and [illegible]

Water is diverted [illegible] into Klamath River [illegible]

The United States [illegible] and furnishes the base data [illegible] the Geological Survey.

*Discharge measurements of Lost River at Wilson Bridge, near Olene, Oreg., in 1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* | | | *Feet.* | *Sec.-ft.* |
| Feb. 20 | L. Moser | 7.55 | 1,[illegible] | Apr. 17 | L. Moser | [illegible] | [illegible] |
| 20 | do | 5.10 | 851 | May 3 | do | [illegible] | [illegible] |
| 22 | do | 3.60 | 625 | 4 | do | [illegible] | [illegible] |
| 24 | do | 2.40 | 409 | 9 | do | [illegible] | [illegible] |
| 26 | do | 1.50 | 210 | 10 | do | −.[illegible] | [illegible] |

*Daily gage height, in feet, of Lost River at Wilson Bridge, near Olene, Oreg., for 1912.*

| Day. | Mar. | Apr. | May. | Day. | Mar. | Apr. | May. | Day. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 1.60 | 2.27 | 11 | | 1.50 | −.30 | 21 | 1.22 | .95 | |
| 2 | | 1.20 | 2.94 | 12 | | 1.55 | | 22 | 1.22 | .96 | |
| 3 | | 1.18 | 3.86 | 13 | | 1.90 | | 23 | 1.10 | .94 | |
| 4 | | 1.30 | 4.02 | 14 | .92 | 1.85 | | 24 | 1.05 | .93 | |
| 5 | | 1.45 | 3.54 | 15 | 1.25 | 1.75 | | 25 | 1.00 | 1.11 | |
| 6 | | 1.00 | 2.10 | 16 | .95 | 1.65 | | 26 | 1.20 | 1.00 | |
| 7 | | 1.08 | 1.42 | 17 | .92 | 1.65 | | 27 | 1.25 | .80 | |
| 8 | | 1.20 | .70 | 18 | .95 | 1.50 | | 28 | 1.30 | .98 | |
| 9 | | 1.10 | .18 | 19 | .90 | 1.30 | | 29 | 1.30 | 1.40 | |
| 10 | | 1.30 | −.25 | 20 | 1.00 | 1.10 | | 30 | 1.30 | 1.45 | |
| | | | | | | | | 31 | 1.30 | | |

*Daily discharge, in second-feet, of Lost River at Wilson Bridge, near Olene, Oreg., for 1912.*

| Day. | Mar. | Apr. | May. | Day. | Mar. | Apr. | May. | Day. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 221 | 340 | 11 | | 221 | 30 | 21 | 197 | 149 | |
| 2 | | 180 | 459 | 12 | | 228 | | 22 | 197 | 150 | |
| 3 | | 177 | 637 | 13 | | 280 | | 23 | 167 | 148 | |
| 4 | | 193 | 789 | 14 | 145 | 272 | | 24 | 161 | 147 | |
| 5 | | 214 | 573 | 15 | 186 | 258 | | 25 | 155 | 168 | |
| 6 | | 155 | 312 | 16 | 149 | 242 | | 26 | 180 | 155 | |
| 7 | | 165 | 210 | 17 | 145 | 242 | | 27 | 190 | 100 | |
| 8 | | 180 | 121 | 18 | 149 | 221 | | 28 | 193 | 153 | |
| 9 | | 107 | 69 | 19 | 143 | 193 | | 29 | 193 | 207 | |
| 10 | | 193 | 34 | 20 | 166 | 167 | | 30 | 193 | 214 | |
| | | | | | | | | 31 | 193 | | |

NOTE.—May 12 to June 30, 1912, all the flow was diverted above the dam. Discharge determined from a fairly well defined rating curve.

*Monthly discharge of Lost River at Wilson Bridge, near Olene, Oreg., for 1912.*

[Drainage area, 1,290 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile | Depth in inches on drainage area. | Total in acre-feet. | |
| March 14-31 | 197 | 143 | 172 | 0.133 | 0.09 | 6,140 | B. |
| April | 280 | 100 | 192 | .149 | .17 | 11,400 | B. |
| May | 789 | 0 | 115 | .089 | .10 | 7,070 | C. |
| June | 0 | 0 | 0 | .000 | .00 | 0 | |

## LOST RIVER NEAR MERRILL, OREG.

This station, which was located 4 miles northwest of Merrill and 7 miles above the junction of the river with Tule Lake, was established July 26, 1904.

The data obtained here are used in connection with general reclamation projects under way in this locality. It is expected that storage reservoirs on the headwaters of this stream will make a large portion of the annual flow available during the summer months, and at the same time lower the water surface in Tule Lake, and thereby expose a considerable area of agricultural lands on the northern border of the lake.

The records obtained at this station are fairly reliable when the water surface in the lake is low. When the lake gage registers 9 feet or more, water is backed up the river to the gaging station, and even at lower lake stages winds blowing up the lake produce the same effect.

After the high water of 1907 it was found impossible to obtain good records of discharge at this station and it was therefore discontinued February 28, 1909, in favor of the station at Olene. A comparison of the records at the two stations since May 20, 1907, will reveal somewhat the inaccuracy of the data at Merrill, as there is little or no difference between the flow at the two points as far as can be ascertained from surface conditions. The years 1905 and 1906, however, were dry years and the records at Merrill were not greatly affected by backwater.

*Discharge measurements of Lost River near Merrill, Oreg., [illegible]*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1904. | | Feet. | Sec.-ft. | 1906. | | Feet. | Sec.-ft. |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | May [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | June [illegible] | do | [illegible] | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | Sept. [illegible] | do | [illegible] | [illegible] |
| 1905. | | | | 1907. | | | |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| [illegible] | do. | [illegible] | [illegible] | [illegible] | do | [illegible] | |
| [illegible] | do. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Mar. [illegible] | do. | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| Apr. [illegible] | do. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do. | [illegible] | [illegible] | Mar. [illegible] | do | [illegible] | [illegible] |
| May [illegible] | do. | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| June [illegible] | do. | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] and [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Sept. [illegible] | do. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1906. | | | | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 25 | [illegible] | [illegible] | [illegible] | [illegible] |
| Mar. [illegible] | do | [illegible] | [illegible] | Apr. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | May [illegible] | [illegible] and Ellsworth | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | June [illegible] | C. H. Ellsworth | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | July 2 | do | [illegible] | [illegible] |
| Apr. [illegible] | do | [illegible] | [illegible] | | | | |
| [illegible] | do | [illegible] | [illegible] | 1909. | | | |
| [illegible] | do | [illegible] | [illegible] | Mar. [illegible] | C. H. Ellsworth | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | Apr. [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | May [illegible] | Ellsworth and Kimble | [illegible] | |
| [illegible] | do | [illegible] | [illegible] | Aug. [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | Sept. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | Oct. [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | [illegible] | [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | Nov. [illegible] | McHenihan and Kimble | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | | | | |

*Daily gage height, in feet, of Lost River near Merrill, Oreg., for 19[illegible]–1909.*

| Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. | Day. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | 1904. | | | | 1904. | | | |
| 1 | | 3.7 | 3.6 | 11 | | 3.7 | 3.55 | 21 | | 3.7 | [illegible] |
| 2 | | 3.7 | 3.6 | 12 | | 3.7 | 3.55 | 22 | | 3.7 | [illegible] |
| 3 | | 3.7 | 3.6 | 13 | | 3.7 | 3.55 | 23 | | 3.7 | [illegible] |
| 4 | | 3.7 | 3.6 | 14 | | 3.7 | 3.55 | 24 | | 3.7 | [illegible] |
| 5 | | 3.7 | 3.6 | 15 | | 3.7 | 3.55 | 25 | | 3.7 | [illegible] |
| 6 | | 3.7 | 3.55 | 16 | | 3.7 | 3.55 | 26 | 3.7 | 3.7 | [illegible] |
| 7 | | 3.7 | 3.55 | 17 | | 3.7 | 3.55 | 27 | 3.7 | 3.6 | [illegible] |
| 8 | | 3.7 | 3.55 | 18 | | 3.7 | 3.55 | 28 | 3.7 | 3.6 | [illegible] |
| 9 | | 3.7 | 3.55 | 19 | | 3.7 | 3.55 | 29 | 3.7 | 3.6 | [illegible] |
| 10 | | 3.7 | 3.55 | 20 | | 3.7 | 3.55 | 30 | 3.7 | 3.6 | [illegible] |
| | | | | | | | | 31 | 3.7 | 3.6 | |

*Daily gage height, in feet, of Lost River near Merrill, Oreg., for [illegible]—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1904–5.** | | | | | | | | | | | | |
| 1 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | 3.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 3.5 | 3.5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | 3.5 | ...... | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| **1905–6.** | | | | | | | | | | | | |
| 1 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | 3.3 | 3.3 | 3.3 | 3.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | 3.3 | 3.3 | 3.3 | 3.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | 3.3 | 3.3 | 3.3 | 3.3 | [illegible] | 4.35 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | 3.3 | 3.3 | 3.3 | 3.3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.5 |
| 7 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | [illegible] | [illegible] | 4.4 | [illegible] | [illegible] | 3.5 | 3.5 |
| 8 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | [illegible] | [illegible] | 4.4 | 4.3 | [illegible] | [illegible] | 3.5 |
| 9 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | [illegible] | [illegible] | [illegible] | 4.3 | [illegible] | [illegible] | 3.5 |
| 10 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | [illegible] | [illegible] | 4.45 | 4.3 | [illegible] | [illegible] | 3.5 |
| 11 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | 4.3 | [illegible] | 4.15 | 4.4 | [illegible] | 3.5 | 3.5 |
| 12 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.5 | 3.5 |
| 13 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3.55 | 3.5 |
| 14 | 3.3 | 3.3 | 3.3 | 3.3 | 3.45 | [illegible] | [illegible] | 4.3 | 4.1 | 3.6 | 3.55 | 3.5 |
| 15 | 3.3 | 3.3 | 3.3 | 3.3 | 3.45 | 5.9 | [illegible] | 4.2 | 4.2 | 3.6 | 3.55 | 3.5 |
| 16 | 3.3 | 3.3 | 3.3 | 3.3 | 3.5 | 5.2 | 10.1 | 4.25 | 4.2 | 3.6 | 3.5 | 3.5 |
| 17 | 3.3 | 3.3 | 3.3 | 3.3 | 3.5 | 4.9 | 9.95 | 4.2 | 4.0 | 3.6 | 3.55 | 3.5 |
| 18 | 3.3 | 3.3 | 3.3 | 3.3 | 3.6 | 4.5 | 9.9 | 4.25 | 3.9 | 3.6 | 3.55 | 3.5 |
| 19 | 3.3 | 3.3 | 3.3 | 3.3 | 3.9 | 4.4 | 9.25 | [illegible] | 3.95 | 3.6 | 3.55 | 3.5 |
| 20 | 3.3 | 3.3 | 3.3 | 3.3 | 4.0 | 4.35 | 8.45 | [illegible] | 3.85 | 3.6 | 3.55 | 3.5 |
| 21 | 3.3 | 3.3 | 3.3 | 3.3 | 4.45 | 4.45 | 7.95 | 4.1 | 3.85 | 3.6 | 3.55 | 3.5 |
| 22 | 3.3 | 3.3 | 3.3 | 3.3 | 5.15 | 4.75 | 7.4 | 4.05 | 3.8 | 3.6 | 3.5 | 3.5 |
| 23 | 3.3 | 3.3 | 3.3 | 3.3 | 5.2 | 5.5 | 7.1 | 4.1 | 3.85 | 3.6 | 3.5 | 3.5 |
| 24 | 3.3 | 3.3 | 3.3 | 3.3 | 5.3 | 6.9 | 6.85 | 4.0 | 3.85 | 3.55 | 3.55 | 3.5 |
| 25 | 3.3 | 3.3 | 3.3 | 3.3 | 4.9 | 10.8 | 6.6 | 4.2 | 3.8 | 3.55 | 3.55 | 3.5 |
| 26 | 3.3 | 3.3 | 3.3 | 3.3 | 4.5 | 11.4 | 6.5 | 4.1 | 3.8 | 3.55 | 3.55 | 3.5 |
| 27 | 3.3 | 3.3 | 3.3 | 3.3 | 4.3 | 12.1 | 6.5 | 4.05 | 3.8 | 3.55 | 3.55 | 3.5 |
| 28 | 3.3 | 3.3 | 3.3 | 3.3 | 4.3 | 12.1 | 6.25 | 4.05 | 3.8 | 3.55 | 3.55 | 3.5 |
| 29 | 3.3 | 3.3 | 3.3 | 3.3 | ....... | 11.5 | 5.85 | 4.1 | 3.7 | 3.55 | 3.5 | 3.5 |
| 30 | 3.3 | 3.3 | 3.3 | 3.3 | ....... | 11.05 | 5.9 | 4.15 | 3.7 | 3.55 | 3.5 | 3.5 |
| 31 | 3.3 | ....... | 3.3 | 3.3 | ....... | 11.5 | ....... | 4.25 | ....... | 3.55 | 3.5 | ...... |
| **1906–7.** | | | | | | | | | | | | |
| 1 | 3.5 | 3.4 | 3.4 | 4.48 | 5.7 | 7.75 | 11.85 | 6.7 | 6.1 | 6.1 | 5.5 | 5.0 |
| 2 | 3.5 | 3.4 | 3.4 | 4.2 | 7.9 | 7.4 | 12.45 | 6.6 | 6.2 | 6.1 | 5.4 | 5.0 |
| 3 | 3.5 | 3.4 | 3.4 | 4.15 | 8.7 | 6.9 | 12.1 | 6.5 | 6.2 | 5.9 | 5.4 | 5.0 |
| 4 | 3.5 | 3.4 | 3.4 | 4.0 | 12.4 | 6.7 | [illegible] | [illegible] | 6.2 | 5.9 | 5.4 | 5.0 |
| 5 | 3.5 | 3.4 | 3.4 | [illegible] | [illegible] | 6.6 | [illegible] | [illegible] | [illegible] | 5.9 | 5.4 | 5.0 |

*Daily gage height, in feet, of Lost River near Merrill, Oreg., for 1904–1909*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sep. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 6 | 3.5 | 3.4 | 3.4 | 3.8 | 18.1 | 6.75 | 11.55 | 6.5 | 6.4 | 5.8 | 5.4 | [illegible] |
| 7 | 3.5 | 3.4 | 3.4 | 3.8 | 18.25 | 7.1 | 10.52 | 6.5 | 6.2 | 5.8 | 5.4 | [illegible] |
| 8 | 3.5 | 3.4 | 3.4 | 3.75 | 16.85 | 7.1 | 10.95 | 6.5 | 6.2 | 5.9 | 5.4 | [illegible] |
| 9 | 3.5 | 3.4 | 3.4 | 3.7 | 14.55 | 7.0 | 12.1 | 6.5 | 6.2 | 5.8 | 5.4 | [illegible] |
| 10 | 3.5 | 3.4 | 3.4 | 3.65 | 11.55 | 7.65 | 12.25 | 6.3 | 6.3 | 5.8 | 5.3 | [illegible] |
| 11 | 3.5 | 3.4 | 3.4 | 3.6 | 9.35 | 7.85 | 10.95 | 6.4 | 6.45 | 5.8 | 5.3 | [illegible] |
| 12 | 3.5 | 3.4 | 3.45 | 3.6 | 8.35 | 7.5 | 10.1 | 6.2 | 6.3 | 5.8 | 5.3 | [illegible] |
| 13 | 3.5 | 3.4 | 3.45 | 3.5 | 7.9 | 6.9 | 9.72 | 6.3 | 6.3 | 5.7 | 5.3 | [illegible] |
| 14 | 3.5 | 3.4 | 3.45 | 3.5 | 7.4 | 6.75 | 9.5 | 6.4 | 6.0 | 5.7 | 5.3 | [illegible] |
| 15 | 3.5 | 3.4 | 3.45 | 3.55 | 7.1 | 6.55 | 9.15 | 6.4 | 6.0 | 5.8 | 5.2 | [illegible] |
| 16 | 3.5 | 3.4 | 3.45 | 3.6 | 6.8 | 6.35 | 8.82 | 6.45 | 6.15 | 5.7 | 5.2 | [illegible] |
| 17 | 3.5 | 3.4 | 3.45 | 3.5 | 6.55 | 6.4 | 8.62 | 6.4 | 6.2 | 5.7 | 5.2 | [illegible] |
| 18 | 3.5 | 3.4 | 3.45 | 3.5 | 6.45 | 7.05 | 8.38 | 6.4 | 6.2 | 5.7 | 5.2 | [illegible] |
| 19 | 3.3 | 3.4 | 3.45 | 3.5 | 6.5 | 9.9 | 8.22 | 6.3 | 6.45 | 5.6 | 5.2 | [illegible] |
| 20 | 3.5 | 3.4 | 3.45 | 3.45 | 6.7 | 13.75 | 8.0 | 6.3 | 6.15 | 5.7 | 5.2 | [illegible] |
| 21 | 3.5 | 3.4 | 3.45 | 3.45 | 6.65 | 15.8 | 7.85 | 6.2 | 6.0 | 5.6 | 5.1 | [illegible] |
| 22 | 3.5 | 3.4 | 3.45 | 3.45 | 6.7 | 16.0 | 7.65 | 6.25 | 6.1 | 5.7 | 5.1 | [illegible] |
| 23 | 3.5 | 3.4 | 3.45 | 3.45 | 6.8 | 14.95 | 7.45 | 6.3 | 6.1 | 5.6 | 5.1 | [illegible] |
| 24 | 3.5 | 3.4 | 3.45 | 3.45 | 8.35 | 13.3 | 7.3 | 6.3 | 6.1 | 5.6 | 5.1 | [illegible] |
| 25 | 3.5 | 3.4 | 3.5 | 3.45 | 8.6 | 11.85 | 7.2 | 6.3 | 6.1 | 5.6 | 5.1 | [illegible] |
| 26 | 3.3 | 3.4 | 3.5 | 3.45 | 7.7 | 11.05 | 7.1 | 6.3 | 6.1 | 5.5 | 5.1 | [illegible] |
| 27 | 3.3 | 3.4 | 3.65 | 3.4 | 7.65 | 10.6 | 6.95 | 6.2 | 6.1 | 5.5 | 5.1 | [illegible] |
| 28 | 3.5 | 3.4 | 4.95 | 3.4 | 8.06 | 10.25 | 6.85 | 6.2 | 6.0 | 5.6 | 5.1 | [illegible] |
| 29 | 3.5 | 3.4 | 5.0 | 3.45 | ....... | 9.95 | 6.8 | 6.3 | 6.0 | 5.5 | 5.0 | [illegible] |
| 30 | 3.3 | 3.4 | 5.2 | 3.45 | ....... | 9.8 | 6.7 | 6.25 | 6.1 | 5.5 | 5.0 | [illegible] |
| 31 | 3.5 | ....... | 4.8 | 3.65 | ....... | 10.4 | ....... | 6.2 | ....... | 5.5 | 5.0 | .. |
| 1907-8. | | | | | | | | | | | | |
| 1 | 4.7 | 4.7 | 4.6 | 3.2 | 5.1 | 5.0 | 5.3 | 5.0 | 4.6 | 4.2 | 3.9 | [illegible] |
| 2 | 4.7 | 4.7 | 4.6 | 5.1 | 5.0 | 3.0 | 5.3 | 4.9 | 4.4 | 4.2 | 3.8 | [illegible] |
| 3 | 4.7 | 4.7 | 4.6 | 5.0 | 5.0 | 5.0 | 5.2 | 4.7 | 4.4 | 4.2 | 3.8 | [illegible] |
| 4 | 4.7 | 4.7 | 4.6 | 5.0 | 5.0 | 5.0 | 5.2 | 4.8 | 4.5 | 4.2 | 3.8 | [illegible] |
| 5 | 4.7 | 4.7 | 4.6 | 3.0 | 5.0 | 5.0 | 5.2 | 4.8 | 4.5 | 4.2 | 3.8 | [illegible] |
| 6 | 4.7 | 4.7 | 4.6 | 5.0 | 5.0 | 5.0 | 5.1 | 4.8 | 4.5 | 4.2 | 3.8 | [illegible] |
| 7 | 4.7 | 4.7 | 4.6 | 4.9 | 5.0 | 5.0 | 5.0 | 4.8 | 4.5 | 4.2 | 3.8 | [illegible] |
| 8 | 4.7 | 4.7 | 4.6 | 4.9 | 5.0 | 3.0 | 5.0 | 4.7 | 4.5 | 4.1 | 3.8 | [illegible] |
| 9 | 4.7 | 4.7 | 4.6 | 4.9 | 5.0 | 5.0 | 5.0 | 4.7 | 4.5 | 4.1 | 3.8 | [illegible] |
| 10 | 4.7 | 4.6 | 4.6 | 4.9 | 5.0 | 5.0 | 5.0 | 4.65 | 4.5 | 4.1 | 3.8 | [illegible] |
| 11 | 4.7 | 4.6 | 4.6 | 4.9 | 4.8 | 5.0 | 5.0 | 4.6 | 4.5 | 4.0 | 3.8 | [illegible] |
| 12 | 4.7 | 4.6 | 4.6 | 4.9 | 4.9 | 5.0 | 5.0 | 4.7 | 4.5 | 4.1 | 3.8 | [illegible] |
| 13 | 4.7 | 4.6 | 4.6 | 4.9 | 4.9 | 5.0 | 5.0 | 4.7 | 4.5 | 4.1 | 3.7 | [illegible] |
| 14 | 4.7 | 4.6 | 4.6 | 4.8 | 4.9 | 3.0 | 5.0 | 4.7 | 4.5 | 4.2 | 3.7 | [illegible] |
| 15 | 4.7 | 4.6 | 4.6 | 4.8 | 4.9 | 5.1 | 5.0 | 4.7 | 4.5 | 3.9 | 3.7 | [illegible] |
| 16 | 4.7 | 4.6 | 4.6 | 4.9 | 4.9 | 5.8 | 5.1 | 4.7 | 4.5 | 4.0 | 3.7 | [illegible] |
| 17 | 4.7 | 4.6 | 4.6 | 5.45 | 4.9 | 7.4 | 5.1 | 4.8 | 4.4 | 4.0 | 3.7 | [illegible] |
| 18 | 4.7 | 4.6 | 4.6 | 6.0 | 4.9 | 7.7 | 5.1 | 5.0 | 4.3 | 4.0 | 3.7 | [illegible] |
| 19 | 4.7 | 4.6 | 4.6 | 6.2 | 4.9 | 7.5 | 5.0 | 4.9 | 4.3 | 4.0 | 3.7 | [illegible] |
| 20 | 4.7 | 4.6 | 4.6 | 6.1 | 4.9 | 6.9 | 5.0 | 4.9 | 4.4 | 3.9 | 3.7 | [illegible] |
| 21 | 4.7 | 4.6 | 4.6 | 5.9 | 4.9 | 6.5 | 5.0 | 4.7 | 4.3 | 3.9 | 3.7 | [illegible] |
| 22 | 4.7 | 4.6 | 4.7 | 5.7 | 4.9 | 6.2 | 4.9 | 4.8 | 4.3 | 3.9 | 3.7 | [illegible] |
| 23 | 4.7 | 4.6 | 4.7 | 5.7 | 4.9 | 6.0 | 4.9 | 4.8 | 4.3 | 3.9 | 3.7 | [illegible] |
| 24 | 4.7 | 4.6 | 4.7 | 5.7 | 4.9 | 6.0 | 4.9 | 4.8 | 4.3 | 3.9 | 3.7 | [illegible] |
| 25 | 4.7 | 4.6 | 4.7 | 5.6 | 4.9 | 5.8 | 4.8 | 4.8 | 4.3 | 3.9 | 3.7 | [illegible] |
| 26 | 4.7 | 4.8 | 4.7 | 5.5 | 4.9 | 5.6 | 4.8 | 4.7 | 4.3 | 3.9 | 3.7 | [illegible] |
| 27 | 4.7 | 4.6 | 5.7 | 5.5 | 4.9 | 5.3 | 4.7 | 4.7 | 4.2 | 3.9 | 3.7 | [illegible] |
| 28 | 4.7 | 4.6 | 5.75 | 5.2 | 4.9 | 5.5 | 4.8 | 4.8 | 4.2 | 3.8 | 3.6 | [illegible] |
| 29 | 4.7 | 4.6 | 5.6 | 5.2 | 5.2 | 5.5 | 4.8 | 4.7 | 4.3 | 3.8 | 3.6 | [illegible] |
| 30 | 4.7 | 4.6 | 5.4 | 5.1 | ....... | 5.4 | 4.9 | 4.6 | 4.3 | 3.8 | 3.5 | [illegible] |
| 31 | 4.7 | ....... | 5.3 | 5.1 | ....... | 5.3 | ....... | 4.6 | ....... | 3.9 | 3.4 | [illegible] |

*Daily gage height, in feet, of Lost River near Merrill, Oreg., for 1904–1909*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Day. | Oct. | Nov. | Dec. | Jan. | Feb. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908-9. | | | | | | 1908-9. | | | | | |
| 1 | 3.6 | 3.5 | 3.5 | 3.5 | 5.0 | 16 | 3.5 | 3.5 | 3.5 | 4.8 | 7.1 |
| 2 | 3.6 | 3.5 | 3.5 | 3.5 | 4.8 | 17 | 3.6 | 3.5 | 3.5 | 9.85 | 7.1 |
| 3 | 3.5 | 3.5 | 3.5 | 3.5 | 4.8 | 18 | 3.5 | 3.5 | 3.5 | 13.2 | 8.85 |
| 4 | 3.5 | 3.5 | 3.5 | 3.5 | 5.4 | 19 | 3.5 | 3.5 | 3.5 | 14.45 | 11.2 |
| 5 | 3.5 | 3.5 | 3.5 | 3.5 | 6.5 | 20 | 3.5 | 3.5 | 3.5 | 14.3 | 10.6 |
| 6 | 3.5 | 3.5 | 3.5 | 3.5 | 5.1 | 21 | 3.5 | 3.5 | 3.5 | 13.6 | 8.5 |
| 7 | 3.5 | 3.5 | 3.5 | 3.5 | 5.0 | 22 | 3.5 | 3.5 | 3.5 | 13.3 | 6.7 |
| 8 | 3.5 | 3.5 | 3.5 | 3.6 | 4.8 | 23 | 3.5 | 3.5 | 3.5 | 13.1 | 6.5 |
| 9 | 3.5 | 3.5 | 3.5 | 3.8 | 4.7 | 24 | 3.5 | 3.5 | 3.5 | 10.0 | 6.7 |
| 10 | 3.5 | 3.5 | 3.5 | 4. | 4.7 | 25 | 3.5 | 3.5 | 3.5 | 8.8 | 6.7 |
| 11 | 3.5 | 3.5 | 3.5 | 4.0 | 4.5 | 26 | 3.5 | 3.5 | 3.5 | 7.6 | 6.4 |
| 12 | 3.5 | 3.5 | 3.5 | 4.2 | 4.5 | 27 | 3.5 | 3.5 | 3.5 | 6.9 | 6.4 |
| 13 | 3.5 | 3.5 | 3.5 | 3.9 | 4.5 | 28 | 3.5 | 3.5 | 3.5 | 6.1 | 6.2 |
| 14 | 3.5 | 3.5 | 3.5 | 3.8 | 5.0 | 29 | 3.5 | 3.5 | 3.5 | 5.6 | ........ |
| 15 | 3.6 | 3.5 | 3.5 | 3.8 | 6.2 | 30 | 3.5 | 3.5 | 3.5 | 5.2 | ........ |
| | | | | | | 31 | 3.5 | ........ | 3.5 | 5.0 | ........ |

*Rating tables for Lost River near Merrill, Oreg.*

**July 16, 1904, to May 17, 1906.**[a]

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 3.30 | 102 | 4.50 | 467 | 5.70 | 887 | 6.90 | 1,307 | 9.20 | 2,160 |
| 3.40 | 125 | 4.60 | 502 | 5.80 | 922 | 7.00 | 1,342 | 9.40 | 2,240 |
| 3.50 | 150 | 4.70 | 537 | 5.90 | 957 | 7.20 | 1,414 | 9.60 | 2,320 |
| 3.60 | 176 | 4.80 | 572 | 6.00 | 992 | 7.40 | 1,488 | 9.80 | 2,400 |
| 3.70 | 203 | 4.90 | 607 | 6.10 | 1,027 | 7.60 | 1,562 | 10.00 | 2,480 |
| 3.80 | 232 | 5.00 | 642 | 6.20 | 1,062 | 7.80 | 1,636 | 11.00 | 2,930 |
| 3.90 | 262 | 5.10 | 677 | 6.30 | 1,097 | 8.00 | 1,710 | 12.00 | 3,440 |
| 4.00 | 294 | 5.20 | 712 | 6.40 | 1,132 | 8.20 | 1,784 | 13.00 | 4,000 |
| 4.10 | 328 | 5.30 | 747 | 6.50 | 1,167 | 8.40 | 1,858 | 14.00 | 4,630 |
| 4.20 | 362 | 5.40 | 782 | 6.60 | 1,202 | 8.60 | 1,932 | | |
| 4.30 | 397 | 5.50 | 817 | 6.70 | 1,237 | 8.80 | 2,006 | | |
| 4.40 | 432 | 5.60 | 852 | 6.80 | 1,272 | 9.00 | 2,080 | | |

**May 18 to December 31, 1906.**[b]

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 3.40 | 66 | 3.90 | 185 | 4.40 | 342 | 4.90 | 511 | 5.40 | 685 |
| 3.50 | 87 | 4.00 | 215 | 4.50 | 375 | 5.00 | 545 | 5.50 | 720 |
| 3.60 | 108 | 4.10 | 246 | 4.60 | 409 | 5.10 | 580 | 5.60 | 755 |
| 3.70 | 131 | 4.20 | 278 | 4.70 | 443 | 5.20 | 615 | | |
| 3.80 | 157 | 4.30 | 310 | 4.80 | 477 | 5.30 | 650 | | |

[a] This table is based on discharge measurements made during 1904-1906 and is well defined.
[b] This table is based on 3 discharge measurements made during 1906 and is well defined between gage heights 3.5 feet and 4.1 feet.

*Daily discharge, in second-feet, of Lost River near Merrill, Oreg., for 1907.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | Day. | Jan. | Feb. | Mar. | Apr. | May. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 444 | 924 | [illegible] | [illegible] | [illegible] | 16 | 130 | 1,130 | 856 | 1,540 | [illegible] |
| 2 | 300 | 1,540 | [illegible] | [illegible] | 540 | 17 | 150 | 1,100 | 856 | 1,450 | [illegible] |
| 3 | 345 | 1,970 | 1,150 | [illegible] | [illegible] | 18 | 150 | [illegible] | 1,050 | 1,380 | [illegible] |
| 4 | 300 | 3,450 | 1,110 | 2,770 | [illegible] | 19 | 150 | 1,090 | [illegible] | 1,310 | [illegible] |
| 5 | 270 | 4,300 | [illegible] | 2,570 | 425 | 20 | 135 | 1,140 | [illegible] | 1,220 | [illegible] |
| 6 | 240 | 9,000 | 1,110 | [illegible] | 450 | 21 | 135 | 1,130 | 5,020 | 1,140 | [illegible] |
| 7 | 240 | 9,200 | 1,250 | [illegible] | 450 | 22 | 135 | 1,140 | 5,780 | [illegible] | [illegible] |
| 8 | 225 | 7,250 | 1,210 | 2,500 | 420 | 23 | 135 | 1,130 | 4,570 | 984 | [illegible] |
| 9 | 215 | 5,140 | 1,140 | [illegible] | 420 | 24 | 135 | 1,140 | 3,740 | 920 | [illegible] |
| 10 | 195 | 3,210 | 1,340 | 3,100 | [illegible] | 25 | 135 | 1,830 | 2,970 | 872 | [illegible] |
| 11 | 190 | 2,140 | 1,410 | 2,470 | [illegible] | 26 | 135 | [illegible] | 2,570 | 824 | [illegible] |
| 12 | 180 | 1,740 | 1,280 | 2,120 | [illegible] | 27 | 120 | 1,470 | 2,330 | 780 | [illegible] |
| 13 | 150 | 1,560 | [illegible] | 1,950 | 330 | 28 | 120 | 1,620 | 2,100 | 686 | [illegible] |
| 14 | 150 | 1,390 | 954 | 1,830 | [illegible] | 29 | 135 | ........ | 2,050 | 664 | [illegible] |
| 15 | 165 | [illegible] | 920 | 1,700 | [illegible] | 30 | 135 | ........ | [illegible] | [illegible] | [illegible] |
| | | | | | | 31 | 135 | ........ | 2,250 | ........ | [illegible] |

NOTE.—Daily discharge determined by the indirect method for shifting channels.

*Monthly discharge of Lost River near Merrill, Oreg., for 1904–1907.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1904.** | | | | | |
| July 26–31 | 203 | 203 | 203 | 2,415 | |
| August | 203 | 176 | 199 | 12,240 | |
| September | 176 | 163 | 165 | 9,818 | |
| **1904–5.** | | | | | |
| October | 163 | 150 | 158 | 9,715 | |
| November | 150 | 150 | 150 | 8,926 | |
| December | 150 | 150 | 150 | 9,223 | |
| January | 782 | 150 | 248 | 15,250 | |
| February | 1,342 | 203 | 514 | 28,550 | |
| March | 642 | 328 | 461 | 28,350 | |
| April | 1,342 | 150 | 470 | 27,970 | |
| May | 150 | 150 | 150 | 9,223 | |
| June | 163 | 125 | 138 | 8,212 | |
| July | 125 | 125 | 125 | 7,686 | |
| August | 125 | 125 | 125 | 7,686 | |
| September | 102 | 102 | 102 | 6,069 | |
| The year | 1,342 | 102 | 233 | 167,000 | |
| **1905–6.** | | | | | |
| October | 102 | 102 | 102 | 6,272 | |
| November | 102 | 102 | 102 | 6,069 | |
| December | 102 | 102 | 102 | 6,272 | |
| January | 102 | 102 | 102 | 6,270 | |
| February | 747 | 102 | 259 | 14,400 | |
| March | 3,500 | 328 | 1,260 | 77,500 | |
| April | 4,380 | 940 | 2,540 | 151,000 | |
| May | 852 | 215 | 386 | 23,700 | |
| June | 375 | 131 | 240 | 14,300 | |
| July | 131 | 98 | 113 | 6,950 | |
| August | 98 | 87 | 93.7 | 5,760 | |
| September | 87 | 87 | 87.0 | 5,180 | |
| The year | 4,380 | 87 | 440 | 324,000 | |
| **1906–7.** | | | | | |
| October | 87 | 87 | 87 | 5,350 | |
| November | 66 | 66 | 66 | 3,930 | |
| December | 755 | 66 | 130 | 7,990 | |
| January | 444 | 120 | 191 | 11,700 | C. |
| February | 9,200 | 824 | 2,600 | 144,000 | B |
| March | 5,780 | 856 | 2,040 | 125,000 | B |
| April | 3,260 | 600 | 1,790 | 107,000 | B |
| May | 600 | 240 | 352 | 21,600 | B |
| The period | ........ | ........ | ........ | 427,000 | |

## TULE LAKE NEAR MERRILL, OREG.

This station, which is located at J. F. Adam's ranch, near the mouth of Lost River, in sec. 8, T. 41 S., R. 11 E., about 3 miles east of Merrill, was established May 17, 1904.

The elevation of the zero of the gage has been taken as 4,048.21 feet above sea level. When the station was established the gage was referred to a bench mark on a juniper post near by. The bench mark at that time was 13.7 feet above the zero of the gage. On October 21, 1904, this elevation was verified. On May 11, 1907, the elevation of the same bench mark was found to be 12.87 feet above zero of the gage, and was independently verified on June 11, 1907, and again on November 27, 1908. It appears, therefore, that some time between October, 1904, and May, 1907, gage was raised 0.83 foot. This change was probably due to action of ice in the lake, although nothing of this kind has been observed since that time. Just when it occurred it has been impossible to ascertain, and a graph of the heights has failed to reveal any critical points that would account for a sudden change. It is therefore likely that the gage was raised a little at a time during the winters of 1905-6 and 1906-7.

On account of this error the gage heights prior to May, 1907, should not be used for refined studies.

The data for this station are furnished by the United States Reclamation Service since 1909.

*Daily gage height, in feet, of Tule Lake near Merrill, Oreg., for 1904-1911.*

| Day. | May. | June. | July. | Aug. | Sept. | Day. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904. | | | | | | 1904. | | | | | |
| 1 | | | | | [illegible] | 16 | | | [illegible] | | |
| 2 | | | | | [illegible] | 17 | [illegible] | | | | |
| 3 | | | | | [illegible] | 18 | | | | | [illegible] |
| 4 | | | | | [illegible] | 19 | | | | | |
| 5 | | | | | [illegible] | 20 | | | | | |
| 6 | | | | | [illegible] | [illegible] | | | | | |
| 7 | | | | | [illegible] | [illegible] | | | | [illegible] | |
| 8 | | | | | [illegible] | [illegible] | | | | | |
| 9 | | | | | [illegible] | [illegible] | | | | | |
| 10 | | 10.40 | | | [illegible] | [illegible] | | | | | |
| 11 | | | | | [illegible] | [illegible] | | | | | |
| 12 | | | | | [illegible] | [illegible] | | | | | |
| 13 | | | | | [illegible] | [illegible] | | | | | |
| 14 | | | | | | [illegible] | [illegible] | | | | |
| 15 | | | | [illegible] | | [illegible] | | | | | |
| | | | | | | [illegible] | | | | [illegible] | |

*Daily gage height, in feet, of Clear Lake near Merritt, Cal., for 1904–1907—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | | | | |
| 1 | [illegible] | | | | | | [illegible] | | | | | |
| 2 | | | | | | | | | [illegible] | [illegible] | | |
| 3 | | | [illegible] | | | | | [illegible] | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 6 | | | | | | [illegible] | | | | | | |
| 7 | | | | | | | | | | | [illegible] | |
| 8 | | | | | | | | | | | | |
| 9 | [illegible] | | | | | | | | | | | |
| 10 | | | | | | | | | [illegible] | [illegible] | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | [illegible] | | | | | | | |
| 13 | | | | [illegible] | | | | | | | | |
| 14 | | | | | | | | | | | | |
| 15 | | [illegible] | | | | [illegible] | | | | | | |
| 16 | | | | | | | | [illegible] | | | | |
| 17 | | | | | | | | | | [illegible] | | |
| 18 | | | | | [illegible] | | | | | | | |
| 19 | | | | | | | | | [illegible] | | | |
| 20 | | | | | | | | | | | | |
| 21 | | | | | | | | | | | [illegible] | |
| 22 | | | | | | | | | | | | |
| 23 | | | | | | | [illegible] | [illegible] | | | | |
| 24 | | | | | | [illegible] | | | | [illegible] | | |
| 25 | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | |
| 27 | | | | | [illegible] | | | | [illegible] | | | |
| 28 | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | |
| 31 | | | | [illegible] | | | | | | [illegible] | [illegible] | |
| 1905-6. | | | | | | | | | | | | |
| 1 | | | | | | | 7.75 | | 9.0 | [illegible] | [illegible] | |
| 2 | | | | | [illegible] | [illegible] | | | | | | |
| 3 | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | [illegible] | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | | | | [illegible] | | | | | |
| 8 | 7.05 | [illegible] | [illegible] | | | | | 9.1 | | | 8.2 | |
| 9 | | | | | [illegible] | [illegible] | | | 9.0 | [illegible] | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | 6.5 | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | | | | | | | | | 9.0 | | | |
| 14 | | | | | | | | | | | | |
| 15 | | | 6.7 | | | | | | | | | |
| 16 | 7.0 | 6.9 | | | | 7.1 | 8.95 | 9.1 | | 8.7 | 8.05 | |
| 17 | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | |
| 21 | | | | | | | | | 8.9 | | | |
| 22 | | | | | | | 9.0 | | | | 7.85 | |
| 23 | 6.9 | 6.8 | | 6.7 | | | | | | 8.45 | | |
| 24 | | | | | | 7.3 | | 9.05 | | | | |
| 25 | | | | | | 7.3 | | | | | | |
| 26 | | | 6.6 | | | | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | | | | | | 7.8 | |
| 29 | | | | | | | | | | | | |
| 30 | 6.95 | 6.8 | | | | 7.7 | 9.1 | | 8.85 | 8.4 | | |
| 31 | | | 6.55 | | | | | 9.0 | | | 7.8 | |
| 1906-7. | | | | | | | | | | | | |
| 1 | 7.4 | 7.35 | 7.0 | 7.35 | 7.4 | 9.05 | 10.05 | 11.35 | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | 10.5 | |
| 4 | | | | | | 9.1 | | | | | | |
| 5 | | | | | | | | | | | | |

*Daily gage height, in feet, of Tule Lake near Merrill, Oreg., for 1904–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | | | | |
| 6 | | | | | | | | | | 10.95 | | |
| 7 | | | | | | | | | | | | |
| 8 | | | 7.1 | 7.3 | | | 10.9 | 11.3 | 11.3 | | | |
| 9 | 7.3 | | | | | | | | | | | |
| 10 | | 7.15 | | | 8.6 | | | | | | 10.4 | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | 9.3 | | | | | | |
| 13 | | | | | | | | | | 10.85 | | |
| 14 | | | | | | | | | | | | 9.95 |
| 15 | | | | | | | | | | | | |
| 16 | | | | 7.3 | | | 11.15 | 11.3 | 11.3 | | | |
| 17 | | | | | | | | | | | 10.3 | |
| 18 | | | 7.25 | | | | | | | | | |
| 19 | 7.2 | | | | 8.8 | | | | | | | |
| 20 | | 7.15 | | | | | | | | 10.75 | | |
| 21 | | | | | | 9.9 | | | | | | 9.8 |
| 22 | | | | | | | 11.3 | | | | | |
| 23 | | | | 7.35 | | | | 11.3 | | | | |
| 24 | | | | | | | | | 11.15 | | 10.25 | |
| 25 | | | 7.3 | | | | | | | | | |
| 26 | | | | | | | | | | | | |
| 27 | | | | | | | | | | 10.65 | | |
| 28 | | | | | 9.05 | | | | | | | 9.75 |
| 29 | | | | | | | | | | | | |
| 30 | | 7.0 | | | | | 11.35 | | 11.0 | | | |
| 31 | 7.15 | | 7.35 | | | 10.5 | | 11.3 | | | 10.15 | |
| 1907-8. | | | | | | | | | | | | |
| 1 | | | | 9.7 | 9.9 | | | | | | 8.7 | |
| 2 | | 9.7 | | 9.7 | | | | 9.9 | | | | |
| 3 | | | | 9.75 | | | | | | | | |
| 4 | | | | 9.8 | | | 10.1 | | | 9.2 | | |
| 5 | 9.75 | | | | | | | | | | | 8.1 |
| 6 | | | | | | | | | 9.6 | | | |
| 7 | | | 9.6 | | | 9.95 | | | | | | |
| 8 | | | | | 9.9 | | | | | | 8.6 | |
| 9 | | 9.7 | | | | | | 9.85 | | | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | 9.8 | | | 10.05 | | | 9.15 | | |
| 12 | 9.75 | | | | | | | | | | | 8.0 |
| 13 | | | | | | | | | 9.45 | | | |
| 14 | | | | | | 9.95 | | | | | | |
| 15 | | | | | 9.9 | | | | | | 8.45 | |
| 16 | | 9.65 | 9.55 | | | | | 9.8 | | | | |
| 17 | | | | | | | | | | | | |
| 18 | | | | 9.85 | | | 10.0 | | | 9.0 | | |
| 19 | 9.75 | | | | | | | | | | | 7.85 |
| 20 | | | | | | | | | 9.35 | | | |
| 21 | | | 9.6 | | | 10.0 | | | | | | |
| 22 | | | | | 9.9 | | | | | | 8.2 | |
| 23 | | 9.6 | | | | | | 9.75 | | | | |
| 24 | | | | | | | | | | | | |
| 25 | | | | 9.9 | | | 9.95 | | | 8.9 | | |
| 26 | 9.75 | | | | | | | | | | | 7.8 |
| 27 | | | | | | | | | 9.25 | | | |
| 28 | | | 9.65 | | | 10.1 | | | | | | |
| 29 | | | 9.65 | | 9.95 | | | | | | 8.1 | |
| 30 | | 9.6 | 9.7 | | | | | 9.7 | | | | |
| 31 | | | 9.7 | | | | | | | | | |
| 1908-9. | | | | | | | | | | | | |
| 1 | | | | | | | | 9.7 | | | | |
| 2 | | | | 7.35 | | | | | | | | |
| 3 | 7.75 | | | | | | 9.4 | | | 9.06 | | |
| 4 | | | | | | | | | | | | 7.95 |
| 5 | | | 7.5 | | | | | | 9.4 | | | |
| 6 | | | | | 8.6 | 9.4 | 9.6 | | | | | |
| 7 | | 7.6 | | | | | | | | | 8.45 | |
| 8 | | | | | | | | 9.7 | | | | |
| 9 | | | | 7.4 | | | | | | | | |
| 10 | 7.7 | | | | | | 9.7 | | | 8.95 | | |

[illegible]

| | | | | May | June | |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7.10 | 7.30 | 8.50 | 8.10 | | 7.45 | 6.95 |

*ily gage height, in feet, of Tule Lake near Merrill, Oreg., for 1904–1911*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 6.45 |
| 17 | | | 6.90 | | | | | | 7.95 | | | |
| 18 | | 6.60 | | | 7.20 | 7.40 | | | | | | |
| 19 | | | | | | | | | | | 6.80 | |
| 20 | | | | | | | | 8.02 | | | | |
| 21 | | | | 7.10 | | | | | | | | |
| 22 | 6.55 | | | | | | 8.65 | | | 7.35 | | |
| 23 | | | | | | | | | | | | 6.40 |
| 24 | | | 7.00 | | | | | | 7.70 | | | |
| 25 | | | | | 7.20 | 7.55 | | | | | | |
| 26 | | 6.65 | | | | | | | | | 6.70 | |
| 27 | | | | | | | | 7.95 | | | | |
| 28 | 6.50 | | | 7.10 | | | | | | | | |
| 29 | | | | | | | 8.50 | | | 7.25 | | |
| 30 | | | | | | | | | | | | 6.30 |
| 31 | | | 7.00 | | | | | | | | | |

| Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. | Day. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911. | | | | 1911. | | | | 1911. | | | |
| 1 | | | | 11 | | 6.10 | | 21 | 6.20 | | |
| 2 | | | 6.10 | 12 | | | | 22 | | | |
| 3 | | | | 13 | | | | 23 | | | 6.10 |
| 4 | | 6.10 | | 14 | 6.30 | | | 24 | | | |
| 5 | | | | 15 | | | | 25 | | 6.10 | |
| 6 | | | | 16 | | | 6.10 | 26 | | | |
| 7 | 6.30 | | | 17 | | | | 27 | | | |
| 8 | | | | 18 | | 6.10 | | 28 | 6.10 | | |
| 9 | | | 6.10 | 19 | | | | 29 | | | |
| 10 | | | | 20 | | | | 30 | | | 6.10 |
| | | | | | | | | 31 | | | |

NOTE.—Lake frozen January, 1905, Dec. 18, 1909, to Mar. 1, 1910, and Jan. 21 to Feb. 25, 1911. Probably frozen during other winters, but no record was made of the fact.

## MILLER CREEK NEAR LORELLA, OREG.

This station, which was established August 10, 1904, was originally located in sec. 13, T. 39 S., R. 13 E., at the lower end of Horsefly Valley. On April 1, 1909, it was moved to an old highway bridge in sec. 7, T. 40 S., R. 14 E., 3 miles south of Lorella post office and 1 mile east of the Swingle ranch in Langell Valley. All measurements in 1909 were referred to this gage. Both points are below all tributaries and the results should be comparable, although the drainage area at the lower station is 50 square miles greater than at the upper, the areas being 270 and 220 square miles, respectively.

A small amount of water is diverted for irrigation by a dam about one-fourth mile above the present station.

A vertical staff gage is attached to the bridge, and its datum has remained unchanged since the station was reestablished. A Bristol self-recording pressure gage was installed May 2, 1909; the records obtained from it have been used during high water, but during low stages it was too much affected by temperature changes and the weekly readings of the staff gage have been used. The Bristol gage was replaced by a Friez recording gage on January 30, 1910, and since that time the gage heights have been fully reliable.

Discharge measurements are made from the highway bridge or by wading at low water.

During the winter months the river freezes over completely, and the data obtained at such periods are not reliable, but a large error during such periods is admissible without affecting the total annual flow. At flood stages, even during the winter, the relation between gage height and discharge is probably not affected by ice.

The conditions at the station during the open season are favorable for good results. A riffle that controls the flow just below the station seems to have shifted slightly during the spring flood of 1910.

High-water measurements made 1911 indicate that the computed flood discharge of November, 1909, is considerably too small, but the yearly total is not materially affected thereby.

This station has been maintained since May, 1909, by the United States Reclamation Service, but the tables of daily and monthly discharge were computed by the United States Geological Survey.

*Discharge measurements of Miller Creek near Lorella, Oreg., in 1904–1911.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1904. | | *Feet.* | *Sec.-ft.* | 1907. | | *Feet.* | *Sec.-ft.* |
| June 24 | T. H. Humphreys | | [a] 15.00 | Feb. 8 | L. F. Hendricks | 7.70 | 332 |
| July 7 | .....do | | [a] 12.00 | Apr. 13 | .....do | 7.95 | 466 |
| Aug. 4 | .....do | | [a] 5.00 | 25 | .....do | 7.00 | 80 |
| 23 | .....do | | [a] 1.00 | May 14 | Stevens and Ellsworth | 6.75 | 57 |
| Sept. 27 | .....do | 6.10 | 1.71 | June 6 | C. E. Ellsworth | 6.20 | 5.8 |
| Oct. 16 | C. T. Darley | 6.20 | 4.09 | 21 | .....do | 6.41 | 16 |
| Nov. 19 | .....do | 6.25 | 7.26 | | | | |
| | | | | 1908. | | | |
| 1905. | | | | Feb. 22 | C. E. Ellsworth | 6.32 | 12 |
| Jan. 28 | C. T. Darley | 7.25 | 146 | Mar. 19 | .....do | 7.56 | 296 |
| Feb. 4 | .....do | 7.30 | 161 | Apr. 7 | .....do | 6.60 | 35 |
| 6 | .....do | 6.99 | 87 | May 1 | Ellsworth and Kimble | 6.10 | 2.0 |
| 25 | .....do | 7.30 | 177 | Nov. 24 | Kimble and McGlashan | 6.09 | 1.5 |
| Mar. 8 | .....do | 7.14 | 124 | | | | |
| 15 | F. S. Chapman | 6.92 | 95 | 1909. | | | |
| Apr. 2 | C. T. Darley | 8.00 | 460 | Mar. 3 | Howard Kimble | 5.90 | 651 |
| 9 | .....do | 6.88 | 62 | 26 | .....do | 4.90 | 285 |
| 28 | .....do | 6.19 | 3.1 | May 2 | .....do | 3.45 | 54 |
| June 1 | .....do | 6.11 | 2.0 | 26 | Kimble and Geiger | 2.92 | 9.5 |
| | | | | Sept. 18 | John Yadon | 2.12 | 1.35 |
| 1906. | | | | Nov. 22 | .....do | 8.05 | 1,590 |
| Mar. 27 | L. F. Hendricks | 8.65 | 883 | 24 | .....do | 6.60 | 891 |
| 28 | C. T. Darley | 8.66 | 884 | | | | |
| 29 | L. F. Hendricks | 8.80 | 1,040 | 1910. | | | |
| 30 | .....do | 9.50 | 1,440 | Aug. 2 | Yadon and Moser | 2.55 | [a] 1.25 |
| 30 | .....do | 10.10 | 1,940 | | | | |
| Apr. 4 | .....do | 8.25 | 629 | 1911. | | | |
| 5 | .....do | 9.00 | 1,110 | Mar. 21 | Leland Moser | 6.40 | 990 |
| 6 | .....do | 9.28 | 1,240 | 21 | .....do | 6.65 | 1,080 |
| 9 | .....do | 10.65 | 2,550 | 29 | .....do | 7.55 | 1,800 |
| 10 | .....do | 9.72 | 1,690 | 31 | .....do | 6.65 | 1,080 |
| 22 | .....do | 7.55 | 308 | 31 | .....do | 8.05 | 2,160 |
| 25 | .....do | 7.62 | 309 | Apr. 6 | .....do | 6.65 | 1,110 |
| July 14 | .....do | 5.80 | 0 | 16 | .....do | 4.90 | 334 |
| | | | | May 3 | .....do | 3.90 | 88.5 |
| 1907. | | | | | | | |
| Feb 8 | L. F. Hendricks | 8.02 | 505 | | | | |

[a] Estimated.

*Daily gage height, in feet, of Miller Creek near Lorella, Oreg., for 1904–1905.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1904. | | | 1904. | | | 1904. | | |
| 1 | | 6.0 | 11 | 6.1 | | 21 | 6.1 | |
| 2 | | 6.0 | 12 | 6.1 | | 22 | [illegible] | |
| 3 | | 6.0 | 13 | 6.1 | | 23 | 6.05 | |
| 4 | | 6.0 | 14 | 6.1 | | 24 | 6.0 | |
| 5 | | 6.0 | 15 | 6.1 | | 25 | 6.0 | |
| 6 | | 6.0 | 16 | 6.1 | | 26 | [illegible] | |
| 7 | 6.1 | 6.0 | 17 | 6.1 | | 27 | [illegible] | 6.1 |
| 8 | 6.1 | 6.0 | 18 | 6.1 | | 28 | 6.0 | 6.1 |
| 9 | 6.1 | 6.0 | 19 | 6.1 | | 29 | 6.0 | 6.1 |
| 10 | 6.1 | 6.0 | 20 | 6.1 | | 30 | 6.0 | 6.1 |
| | | | | | | 31 | 6.0 | |

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1904–5. | | | | | | | | | |
| 1 | 6.1 | 6.1 | 6.2 | 6.3 | 8.0 | 7.2 | 7.0 | 6.3 | 6.2 |
| 2 | 6.1 | 6.2 | 6.2 | 6.3 | 8.2 | 7.2 | 8.0 | 6.3 | 6.1 |
| 3 | 6.1 | 6.2 | 6.15 | 6.3 | 7.7 | 7.8 | 7.8 | 6.3 | 6.1 |
| 4 | 6.1 | 6.2 | 6.1 | 6.3 | 7.8 | 7.8 | 7.6 | 6.3 | 6.2 |
| 5 | 6.1 | 6.2 | 6.1 | 6.3 | 7.7 | 7.8 | 7.4 | 6.3 | 6.2 |
| 6 | 6.1 | 6.2 | 6.1 | 6.3 | 7.0 | 7.2 | 7.2 | 6.3 | 6.3 |
| 7 | 6.1 | 6.2 | 6.1 | 6.3 | 7.0 | 7.2 | 7.0 | 6.2 | 6.3 |
| 8 | 6.1 | 6.2 | 6.1 | 6.3 | 7.0 | 7.2 | 6.9 | 6.2 | 6.3 |
| 9 | 6.15 | 6.2 | 6.1 | 6.3 | 7.0 | 7.1 | 6.8 | 6.4 | 6.3 |
| 10 | 6.15 | 6.15 | 6.1 | 6.3 | 6.9 | 7.1 | 6.8 | 6.4 | 6.3 |
| 11 | 6.3 | 6.15 | | 6.3 | 6.6 | 7.0 | 6.8 | 6.4 | 6.3 |
| 12 | 6.3 | 6.15 | | 6.3 | 6.5 | 7.1 | 6.6 | 6.4 | 6.3 |
| 13 | 6.2 | 6.15 | | 6.3 | 6.5 | 7.1 | 6.6 | 6.4 | 6.2 |
| 14 | 6.15 | 6.15 | | 6.3 | 6.4 | 7.1 | 6.5 | 6.4 | 6.2 |
| 15 | 6.2 | 6.11 | | 6.3 | 6.4 | 6.9 | 6.5 | 6.3 | 6.2 |
| 16 | 6.2 | 6.11 | | 7.5 | 6.4 | 7.3 | 6.6 | 6.3 | 6.2 |
| 17 | 6.2 | 6.1 | | 7.6 | 6.4 | 7.3 | 6.6 | 6.3 | |
| 18 | 6.2 | 6.3 | | 7.7 | 6.4 | 7.3 | 6.6 | 6.3 | |
| 19 | 6.1 | 6.2 | | 7.5 | 6.8 | 7.4 | 6.5 | 6.3 | |
| 20 | 6.1 | 6.2 | | 7.5 | 7.2 | 7.4 | 6.5 | 6.2 | |
| 21 | 6.1 | 6.2 | | 7.5 | 7.3 | 7.1 | 6.5 | 6.1 | |
| 22 | 6.1 | 6.2 | | 7.9 | 7.3 | 7.3 | 6.4 | 6.0 | |
| 23 | 6.1 | 6.2 | | 8.2 | 7.3 | 7.3 | 6.4 | 6.0 | |
| 24 | 6.1 | 6.2 | | 7.9 | 7.3 | 7.2 | 6.4 | 6.0 | |
| 25 | 6.1 | 6.2 | | 7.9 | 7.3 | 7.2 | 6.3 | 5.9 | |
| 26 | 6.1 | 6.2 | | 7.7 | 7.3 | 7.9 | 6.3 | | |
| 27 | 6.1 | 6.2 | | 7.7 | 7.3 | 7.5 | 6.2 | 6.1 | |
| 28 | 6.1 | 6.2 | | 7.3 | 7.3 | 7.4 | 6.2 | 6.1 | |
| 29 | 6.1 | 6.2 | | 7.5 | | 7.4 | 6.2 | 6.2 | |
| 30 | 6.1 | 6.2 | | 8.0 | | 7.2 | 6.2 | 6.3 | |
| 31 | 6.1 | | | 8.3 | | 7.2 | | 6.2 | |

[illegible]

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | Fe | Mn | [illegible] | Mg | [illegible] |
| | [illegible] | [illegible] | 7.7[illegible] | 7.[illegible] | ....... | [illegible] | [illegible] |
| | [illegible] | [illegible] | 8.[illegible] | 7.[illegible] | ....... | [illegible] | [illegible] |
| | [illegible] | 1[illegible] | [illegible] | [illegible] | ....... | [illegible] | [illegible] |
| | [illegible] | 1 | [illegible] | [illegible] | ....... | [illegible] | [illegible] |
| | [illegible] | [illegible] | [illegible] | 7.[illegible] | ....... | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | 22.0[illegible] | 7 [illegible] | 3.[illegible] | 4.[illegible] | [illegible] |
| | [illegible] | [illegible] | 19.0[illegible] | [illegible] | [illegible] | [illegible] | |
| | [illegible] | [illegible] | [illegible] | 7.[illegible] | . . . | 4.[illegible] | [illegible] |
| | [illegible] | [illegible] | 7.[illegible] | 7.[illegible] | . . . | [illegible] | |
| | [illegible] | [illegible] | 7.6[illegible] | 7.[illegible] | . . . | [illegible] | |
| | [illegible] | [illegible] | 7.[illegible] | 7.[illegible] | . . . | [illegible] | |
| | [illegible] | [illegible] | 7.[illegible] | 7.[illegible] | | [illegible] | |
| | [illegible] | [illegible] | 7.[illegible] | 7.[illegible] | [illegible] | [illegible] | |
| | [illegible] | [illegible] | 7.2[illegible] | 7.[illegible] | | [illegible] | |
| | [illegible] | [illegible] | 7.[illegible] | 7.[illegible] | | [illegible] | |
| | [illegible] | [illegible].30 | 7.[illegible] | 7.[illegible] | ..... | [illegible] | |
| | [illegible] | [illegible].30 | 7.[illegible] | [illegible] | ..... | [illegible] | |
| [illegible] | [illegible] | [illegible].30 | 7.[illegible] | [illegible] | ..... | [illegible] | |
| [illegible] | [illegible] | [illegible].30 | 7.4[illegible] | [illegible] | .... | [illegible] | |
| [illegible] | [illegible] | [illegible].30 | 7.[illegible] | [illegible] | 7.1 | [illegible] | |
| [illegible] | [illegible] | [illegible].30 | 7.3 | [illegible] | 7.1 | [illegible] | |
| [illegible] | [illegible] | [illegible].10 | 8.0[illegible] | [illegible].0 | 7.1 | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible].2[illegible] | 7.8[illegible] | [illegible].7 | 7.6 | [illegible] | |
| [illegible] | [illegible] | [illegible].2[illegible] | 7.4[illegible] | [illegible].3 | 7.0 | | |
| [illegible] | 7.6[illegible] | 6.8[illegible] | 7.8[illegible] | 7.9 | 7.0 | [illegible] | |
| [illegible] | [illegible] | 4.8[illegible] | 7.8[illegible] | 7.0 | [illegible].5 | [illegible] | |
| [illegible] | 7.8[illegible] | 6.8[illegible] | 7.7[illegible] | 7.[illegible] | [illegible].9 | [illegible] | |
| [illegible] | [illegible] | 6.8[illegible] | 7.4[illegible] | 7.6[illegible] | [illegible].5 | [illegible] | |
| [illegible] | [illegible] | 6.6[illegible] | ....... | 7.8[illegible] | [illegible].5 | [illegible] | |
| [illegible] | [illegible] | 7.[illegible] | ....... | [illegible].5 | [illegible].0 | 3 | |
| | [illegible] | 7.8[illegible] | ....... | [illegible] | ...... | [illegible] | |

*Daily gage height, in feet, of Miller Creek [illegible], 1907–1909*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June |
|---|---|---|---|---|---|---|---|---|---|
| **1907–8.** | | | | | | | | | |
| | | [illegible] | | | [illegible] | | [illegible] | [illegible] | |
| | | [illegible] | | | | | [illegible] | [illegible] | |
| | | [illegible] | | | | | [illegible] | [illegible] | [illegible] |
| | | [illegible] | | [illegible] | | | [illegible] | [illegible] | |
| | | 6.19 | | | | | [illegible] | [illegible] | |
| | | 6.19 | | | | | [illegible] | [illegible] | |
| | | [illegible] | 6.20 | | | [illegible] | [illegible] | [illegible] | [illegible] |
| | | | | | [illegible] | | [illegible] | [illegible] | |
| | | 6.10 | | | [illegible] | | [illegible] | | |
| | | 6.10 | | | [illegible] | | [illegible] | [illegible] | |
| | | 6.10 | | [illegible] | [illegible] | | [illegible] | [illegible] | |
| | | 6.10 | | | [illegible] | | [illegible] | [illegible] | |
| | | 6.10 | | | [illegible] | | [illegible] | [illegible] | |
| | | 6.10 | 6.10 | | | [illegible] | [illegible] | [illegible] | [illegible] |
| | | 6.10 | | | [illegible] | | [illegible] | [illegible] | |
| | | 6.10 | | | [illegible] | | [illegible] | [illegible] | |
| | | 6.12 | | | [illegible] | | [illegible] | [illegible] | |
| | | 6.11 | | 7.20 | [illegible] | | [illegible] | | |
| | | 6.11 | | 7.30 | [illegible] | [illegible] | [illegible] | | |
| | | 6.11 | | [illegible] | [illegible] | | [illegible] | | |
| | | 6.11 | 6.40 | 7.32 | | [illegible] | [illegible] | | |
| | | 6.16 | | 7.34 | [illegible] | | [illegible] | | |
| | | 6.20 | 8.00 | 7.37 | | | [illegible] | | |
| | | | 8.00 | | | | [illegible] | [illegible] | |
| | | | 7.60 | 7.40 | | | [illegible] | | |
| | 6.12 | | 7.15 | | | | [illegible] | | |
| | 6.15 | | 7.15 | | | | [illegible] | | |
| | 6.20 | | 7.05 | | | [illegible] | [illegible] | | |
| | 6.17 | | | | [illegible] | | [illegible] | | |
| | 6.20 | 6.10 | | | | | | | |
| | 6.20 | | | | | [illegible] | | | |

| Day. | Nov. | Dec. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| **1908–9.** | | | | | | | | | |
| | | 6.01 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| | | | | | [illegible] | [illegible] | [illegible] | | |
| | | | [illegible] | | [illegible] | [illegible] | [illegible] | | |
| | | | | | [illegible] | [illegible] | [illegible] | | |
| | | 6.02 | | | [illegible] | [illegible] | [illegible] | | |
| | | | | | [illegible] | [illegible] | [illegible] | | |
| | | | | | [illegible] | [illegible] | | | |
| | | | | [illegible] | [illegible] | [illegible] | [illegible] | | |
| | | | | | | [illegible] | [illegible] | | |
| | | | | | | [illegible] | [illegible] | | |

*Daily gage height, in feet, of Miller Creek near Lorella, Oreg., for 1904–1912*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|
| **1906.** | | | | | | | |
| 1 | 6.2 | 6.3 | 7.0 | 8.1 | 7.0 | 7.2 | 6.15 |
| 2 | 6.2 | 6.3 | 7.1 | 8.1 | 7.0 | 7.0 | 6.15 |
| 3 | 6.2 | 6.3 | 7.1 | 8.4 | 6.9 | 6.9 | 6.1 |
| 4 | 6.2 | 6.3 | 7.05 | 8.15 | 6.8 | 6.9 | 6.1 |
| 5 | 6.2 | 6.3 | 7.0 | 9.2 | 6.7 | 7.0 | 6.05 |
| 6 | 6.2 | 6.3 | 7.05 | 9.5 | 6.7 | 7.3 | 6.05 |
| 7 | 6.3 | 6.3 | 7.2 | 9.9 | 6.7 | 7.2 | 6.0 |
| 8 | 6.3 | 6.3 | 7.5 | 9.9 | 6.6 | 7.2 | 6.0 |
| 9 | 6.4 | 6.3 | 7.7 | 10.5 | 6.6 | 7.1 | ........ |
| 10 | 6.4 | 6.3 | 7.8 | 10.0 | 6.5 | 7.0 | ........ |
| 11 | 6.4 | 6.3 | 7.7 | 9.1 | 6.5 | 6.9 | ........ |
| 12 | 6.3 | 6.3 | 7.6 | 8.8 | 6.5 | 6.8 | ........ |
| 13 | 6.3 | 6.3 | 7.5 | 8.8 | 6.6 | 6.8 | ........ |
| 14 | 6.3 | 6.3 | 7.3 | 8.7 | 6.7 | 6.7 | ........ |
| 15 | 6.3 | 6.3 | 7.1 | 8.7 | 6.7 | 6.6 | ........ |
| 16 | 6.3 | 6.3 | 6.9 | 8.9 | 6.7 | 6.5 | ........ |
| 17 | 6.3 | 6.3 | 6.7 | 8.5 | 6.7 | 6.5 | ........ |
| 18 | 6.3 | 6.3 | 6.7 | 8.1 | 6.6 | 6.4 | ........ |
| 19 | 6.3 | 6.3 | 6.7 | 7.9 | 6.6 | 6.4 | ........ |
| 20 | 6.3 | 6.3 | 6.7 | 7.8 | 6.5 | 6.3 | ........ |
| 21 | 6.3 | 6.3 | 7.2 | 7.7 | 6.5 | 6.3 | ........ |
| 22 | 6.3 | 6.3 | 7.8 | 7.5 | 6.5 | 6.2 | ........ |
| 23 | 6.3 | 6.3 | 8.3 | 7.5 | 6.5 | 6.2 | ........ |
| 24 | 6.3 | 6.2 | 8.8 | 7.4 | 6.5 | 6.1 | ........ |
| 25 | 6.3 | 6.4 | 9.7 | 7.5 | 6.4 | 6.1 | ........ |
| 26 | 6.3 | 6.6 | 9.0 | 7.4 | 6.5 | 6.1 | ........ |
| 27 | 6.3 | 6.7 | 8.6 | 7.3 | 6.8 | 6.1 | ........ |
| 28 | 6.3 | 6.8 | 8.65 | 7.4 | 7.1 | 6.15 | ........ |
| 29 | 6.3 | ........ | 8.65 | 7.4 | 7.5 | 6.15 | ........ |
| 30 | 6.3 | ........ | 9.7 | 7.2 | 7.5 | 6.15 | ........ |
| 31 | 6.3 | ........ | 9.6 | ........ | 7.4 | ........ | ........ |

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|
| 1906-7. | | | | | | | | | |
| 1 | ........ | 6.1 | 6.45 | 7.70 | 7.30 | ........ | 6.77 | 6.26 | ........ |
| 2 | ........ | 6.1 | 6.20 | 8.90 | 7.30 | ........ | 6.73 | 6.25 | ........ |
| 3 | ........ | 6.1 | 6.10 | 11.55 | 7.25 | ........ | 6.70 | 6.24 | ........ |
| 4 | ........ | 6.1 | 6.10 | 13.00 | 7.20 | ........ | 6.70 | 6.20 | ........ |
| 5 | ........ | 6.2 | 6.10 | 14.00 | 7.35 | ........ | 6.68 | 6.18 | ........ |
| 6 | ........ | 6.2 | 6.10 | 12.00 | 7.40 | 8.10 | 6.65 | 6.22 | 6.00 |
| 7 | ........ | 6.35 | 6.10 | 10.00 | 7.40 | 9.50 | 6.65 | ........ | ........ |
| 8 | ........ | 6.4 | 6.10 | 7.70 | 7.85 | ........ | 6.65 | 6.35 | ........ |
| 9 | ........ | 6.3 | 6.10 | 7.85 | 7.90 | ........ | 6.63 | ........ | ........ |
| 10 | ........ | 6.3 | 6.10 | 7.65 | 7.55 | ........ | 6.58 | ........ | ........ |
| 11 | ........ | 6.3 | 6.10 | 7.55 | 7.50 | ........ | 6.70 | ........ | ........ |
| 12 | ........ | 6.2 | 6.10 | 7.45 | 7.30 | ........ | 6.78 | ........ | ........ |
| 13 | ........ | 6.2 | 6.10 | 7.30 | 7.35 | 8.00 | 6.81 | ........ | ........ |
| 14 | ........ | 6.2 | 6.10 | 7.25 | 7.20 | ........ | 6.75 | ........ | ........ |
| 15 | ........ | 6.2 | 6.10 | 7.20 | 7.20 | ........ | 6.66 | 7.00 | ........ |
| 16 | ........ | 6.2 | 6.10 | 7.20 | 7.20 | ........ | 6.58 | ........ | ........ |
| 17 | ........ | 6.2 | 6.10 | 7.35 | 8.00 | ........ | 6.50 | ........ | ........ |
| 18 | 6.1 | 6.2 | 6.10 | 7.50 | 9.80 | ........ | 6.50 | ........ | ........ |
| 19 | 6.1 | 6.2 | 6.10 | 7.40 | 10.15 | ........ | 6.58 | ........ | ........ |
| 20 | 6.1 | 6.25 | 6.10 | 7.35 | 9.80 | 7.10 | 6.62 | ........ | ........ |
| 21 | 6.1 | 6.3 | 6.10 | 7.30 | 9.40 | 7.10 | 6.65 | ........ | ........ |
| 22 | 6.1 | 6.3 | 6.10 | 8.00 | 9.00 | 7.10 | 6.75 | 6.30 | ........ |
| 23 | 6.1 | 6.4 | 6.20 | 7.80 | 8.70 | 7.05 | 6.70 | ........ | ........ |
| 24 | 6.1 | 6.6 | 6.20 | 7.40 | 8.30 | 7.00 | ........ | ........ | ........ |
| 25 | 6.1 | 7.65 | 6.30 | 7.80 | 7.90 | 7.00 | 6.70 | ........ | ........ |
| 26 | 6.1 | 8.35 | 6.30 | 7.85 | 7.60 | 6.95 | 6.65 | ........ | 5.70 |
| 27 | 6.1 | 7.95 | 6.30 | 7.70 | 7.75 | 6.90 | 6.57 | ........ | ........ |
| 28 | 6.1 | 7.4 | 6.30 | 7.40 | 7.65 | 6.88 | 6.49 | ........ | ........ |
| 29 | 6.1 | 7.4 | 6.65 | ........ | 7.95 | 6.85 | 6.42 | 6.10 | ........ |
| 30 | 6.1 | 6.8 | 7.20 | ........ | 8.50 | 6.80 | 6.35 | ........ | ........ |
| 31 | ........ | 6.6 | 7.95 | ........ | 8.40 | ........ | 6.29 | ........ | ........ |

[illegible] Met[illegible] [illegible] Continue[illegible]

[illegible]

[illegible]

*Mean gage height, in feet, of Miller Creek near Lorella, Oreg., for 1904–1912*—Continued

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | | | | | | | | | | | | |
| 1 | | | | 2.30 | 3.95 | 8.50 | 4.24 | 2.85 | 2.95 | 2.66 | 2.60 | [illegible] |
| 2 | | | | 2.40 | 3.75 | 7.10 | 4.10 | 2.95 | 2.95 | 2.70 | 2.60 | [illegible] |
| 3 | [illegible] | | | 2.40 | 3.36 | 6.70 | 4.02 | 3.12 | 2.94 | 2.70 | 2.60 | [illegible] |
| 4 | | | | 2.30 | 3.30 | 7.00 | 3.95 | 3.22 | 2.80 | 2.70 | 2.60 | [illegible] |
| 5 | [illegible] | | 3.30 | 2.40 | 3.00 | 6.80 | 3.85 | 3.18 | 2.78 | 2.70 | 2.60 | [illegible] |
| 6 | | | | 2.60 | 3.08 | 6.40 | 3.76 | 3.08 | 2.78 | 2.70 | 2.58 | [illegible] |
| 7 | | 3.00 | | 2.30 | 3.08 | 6.10 | 3.65 | 2.98 | 2.77 | 2.70 | 2.59 | [illegible] |
| 8 | | | | 2.50 | 3.08 | 6.05 | 3.56 | 2.90 | 2.75 | 2.70 | 2.60 | [illegible] |
| 9 | | | | 2.00 | 3.08 | 6.10 | 3.50 | 2.78 | 2.74 | 2.70 | 2.61 | [illegible] |
| 10 | [illegible] | | | [illegible] | 3.08 | 6.10 | 3.45 | 2.72 | 2.71 | 2.70 | 2.63 | [illegible] |
| 11 | | | | [illegible] | 3.15 | 6.15 | 3.45 | 2.65 | 2.70 | 2.70 | 2.64 | [illegible] |
| 12 | | | 3.40 | 2.00 | 3.18 | 6.30 | 3.30 | 2.50 | 2.70 | 2.65 | 2.66 | [illegible] |
| 13 | | | | 2.30 | 3.70 | 6.10 | 3.37 | 2.48 | 2.70 | 2.65 | 2.68 | [illegible] |
| 14 | | [illegible] | | 2.30 | 3.42 | 6.10 | 3.25 | 2.35 | 2.70 | 2.62 | 2.69 | [illegible] |
| 15 | | | | 2.10 | 3.38 | 6.00 | 3.15 | 2.28 | 2.72 | 2.62 | 2.70 | [illegible] |
| 16 | | | | [illegible] | [illegible] | [illegible] | 3.08 | 2.22 | 2.78 | 2.60 | 2.70 | [illegible] |
| 17 | [illegible] | | | [illegible] | [illegible] | 5.90 | 2.95 | 2.19 | [illegible] | 2.60 | 2.71 | [illegible] |
| 18 | | [illegible] | [illegible] | [illegible] | [illegible] | 6.00 | 2.90 | 2.52 | [illegible] | 2.60 | 2.70 | [illegible] |
| 19 | | [illegible] | | [illegible] | [illegible] | [illegible] | 2.91 | 2.90 | [illegible] | 2.61 | 2.70 | [illegible] |
| 20 | | [illegible] | | [illegible] | [illegible] | 5.54 | 2.74 | 2.95 | 2.76 | 2.63 | 2.70 | [illegible] |
| 21 | | [illegible] | | [illegible] | [illegible] | [illegible] | 2.71 | 2.95 | 2.75 | 2.64 | 2.70 | [illegible] |
| 22 | | [illegible] | | [illegible] | [illegible] | [illegible] | 2.70 | 2.96 | 2.75 | 2.63 | 2.70 | [illegible] |
| 23 | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | 2.92 | 2.75 | 2.60 | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | 2.90 | 2.74 | 2.60 | 2.62 | [illegible] |
| 25 | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | 2.91 | [illegible] | 2.60 | 2.50 | [illegible] |
| 26 | | [illegible] | [illegible] | [illegible] | 4.20 | [illegible] | [illegible] | 2.94 | [illegible] | [illegible] | 2.56 | [illegible] |
| 27 | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | 2.92 | [illegible] | [illegible] | 2.60 | [illegible] |
| 28 | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | 2.90 | [illegible] | [illegible] | 2.60 | [illegible] |
| 29 | | [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 2.60 | [illegible] |
| 30 | | [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] | 2.65 | [illegible] | 2.62 | [illegible] |
| 31 | [illegible] | | | [illegible] | | [illegible] | | [illegible] | | [illegible] | 2.64 | |
| [illegible] | | | | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | 2.70 | 2.95 | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | 2.30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | | |
| 31 | [illegible] | | [illegible] | [illegible] | | [illegible] | | [illegible] | | | | |

*Daily gage height, in feet, of Miller Creek near Lorella, Oreg., for 1904–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| **1911–12.** | | | | | | | | | |
| 1 | 2.60 | 2.80 | ........ | 3.12 | 3.63 | 3.30 | 3.80 | 5.80 | 3.08 |
| 2 | ........ | 2.80 | 2.90 | 3.13 | 3.50 | 3.40 | 3.80 | 6.10 | 2.98 |
| 3 | ........ | 2.80 | 2.90 | 3.13 | 3.58 | 3.50 | 3.80 | 5.95 | 2.82 |
| 4 | ........ | 2.80 | 2.90 | 3.05 | 3.63 | 3.70 | 3.80 | 5.27 | 2.78 |
| 5 | ........ | 2.81 | 2.90 | 3.00 | 4.20 | 3.70 | 3.80 | 4.75 | 2.57 |
| 6 | ........ | 2.82 | 2.81 | 3.00 | 4.10 | 3.70 | 3.80 | 4.85 | 2.45 |
| 7 | 2.68 | 2.83 | 2.82 | 3.00 | 4.10 | 3.70 | 3.80 | 4.50 | 2.42 |
| 8 | 2.67 | 2.86 | 2.82 | 3.00 | 4.95 | 3.70 | 3.95 | 4.18 | 2.45 |
| 9 | 2.68 | 2.97 | 2.90 | 3.00 | 5.10 | 3.66 | 3.97 | 3.91 | 2.70 |
| 10 | ........ | 2.97 | 2.90 | 3.00 | 5.20 | 3.64 | 4.00 | 3.78 | 2.58 |
| 11 | ........ | 3.00 | 2.90 | 3.00 | 4.86 | 3.52 | 4.36 | 3.67 | 2.45 |
| 12 | ........ | 3.00 | 2.90 | 3.15 | 4.22 | 3.47 | 4.30 | 3.60 | 2.40 |
| 13 | ........ | 3.00 | 2.90 | 3.52 | 3.98 | 3.65 | 4.15 | 3.50 | 2.49 |
| 14 | 2.70 | 2.97 | 2.90 | 3.65 | 4.04 | 3.50 | 4.09 | 3.49 | 2.55 |
| 15 | ........ | 2.98 | 2.90 | 3.59 | 5.00 | 3.38 | 4.19 | 3.23 | 2.62 |
| 16 | ........ | 3.10 | 2.92 | 3.45 | 7.90 | 3.48 | 3.90 | 3.12 | 2.78 |
| 17 | ........ | 3.14 | 2.92 | 3.38 | 8.40 | 3.55 | 3.84 | 3.08 | 2.65 |
| 18 | ........ | 3.07 | 2.93 | 3.27 | 6.00 | 3.90 | 3.99 | 3.00 | 2.53 |
| 19 | ........ | 3.00 | 2.93 | 3.25 | 4.50 | 3.96 | 3.75 | 2.98 | 2.40 |
| 20 | ........ | 2.94 | 2.93 | 3.25 | 3.52 | 3.80 | 3.75 | 2.92 | 2.30 |
| 21 | 2.80 | 2.90 | 2.94 | 3.25 | 3.50 | 3.65 | 3.65 | 3.05 | 2.29 |
| 22 | ........ | 2.88 | 3.05 | 3.48 | 3.50 | 3.60 | 3.70 | 3.28 | 2.35 |
| 23 | ........ | 2.98 | 3.40 | 3.50 | 3.50 | 3.80 | 3.75 | 3.41 | 2.49 |
| 24 | ........ | 2.85 | 3.40 | 4.42 | 3.29 | 4.00 | 3.80 | 3.49 | 2.53 |
| 25 | ........ | 2.80 | 3.40 | 6.50 | 3.29 | 4.00 | 3.90 | 3.50 | 2.53 |
| 26 | ........ | 2.80 | 3.40 | 6.10 | 3.29 | 3.98 | 4.00 | 3.54 | 2.65 |
| 27 | ........ | 2.80 | 3.40 | 4.70 | 3.11 | 3.96 | 4.12 | 3.54 | 2.88 |
| 28 | ........ | 2.80 | ........ | 4.40 | 3.15 | 3.96 | 3.92 | 3.49 | 2.91 |
| 29 | ........ | 2.80 | ........ | 4.10 | 3.20 | 3.96 | 4.48 | 3.42 | 2.91 |
| 30 | ........ | ........ | ........ | 3.55 | ........ | 3.98 | 5.70 | 3.22 | ........ |
| 31 | ........ | ........ | ........ | 3.75 | ........ | 3.80 | ........ | 3.10 | ........ |

NOTE.—River dry June 17 to Dec. 31, 1905; July 7 to Nov. 17, 1906; July 18 to Oct. 25, 1907; and July 1 to Nov. 10, 1908. River freezes over at the gage during the winter, but not at the riffle control, so the discharge is not materially affected. Low gage heights, Jan. 9 to 20, 1910, probably due to low temperature and not low discharge.

*Rating tables for Miller Creek near Lorella, Oreg.*

**August 7, 1904, to December 31, 1905.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 6.00 | 0 | 6.80 | 52 | 7.60 | 274 | 8.40 | 665 |
| 6.10 | 1.5 | 6.90 | 67 | 7.70 | 317 | 8.50 | 717 |
| 6.20 | 4 | 7.00 | 86 | 7.80 | 363 | 8.60 | 770 |
| 6.30 | 8 | 7.10 | 109 | 7.90 | 411 | 8.70 | 823 |
| 6.40 | 13 | 7.20 | 135 | 8.00 | 460 | 8.80 | 876 |
| 6.50 | 20 | 7.30 | 163 | 8.10 | 510 | 8.90 | 929 |
| 6.60 | 29 | 7.40 | 196 | 8.20 | 561 | 9.00 | 982 |
| 6.70 | 39 | 7.50 | 234 | 8.30 | 613 | ........ | ........ |

NOTE.—The above table is based on 13 discharge measurements made during 1904–5, and is well defined between gage heights 6.1 feet and 8 feet.

**January 1 to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ........ | ........ | 7.60 | 290 | 8.40 | 715 | 9.40 | 1,415 |
| ........ | ........ | 7.70 | 337 | 8.50 | 775 | 9.60 | 1,575 |
| ........ | ........ | 7.80 | 387 | 8.60 | 835 | 9.80 | 1,745 |
| ........ | ........ | 7.90 | [illegible] | [illegible] | 900 | 10.00 | 1,915 |
| 7.20 | 136 | 8.00 | [illegible] | [illegible] | 965 | 10.20 | 2,085 |
| 7.30 | 168 | 8.10 | [illegible] | [illegible] | 1,035 | 10.40 | 2,265 |
| 7.40 | 205 | 8.20 | [illegible] | | | | |
| 7.50 | 245 | 8.30 | [illegible] | | | | |

NOTE.—This table is based on discharge [illegible] Below gage height 7.20 feet this table is the same [illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily discharge, in second-feet, of Miller Creek near Lorella, Oreg., for 1909–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 1.3 | 6 | 34 | 2 | 111 | 2,620 | 148 | 6 | 8 | 3 | 2 | 2 |
| 2 | 1.4 | 6 | 34 | 3 | 84 | 1,410 | 122 | 9 | 8 | 3 | 2 | 2 |
| 3 | 1.5 | 6 | 34 | 3 | 61 | 1,120 | 109 | 14 | 8 | 3 | 2 | 2 |
| 4 | 1.5 | 12 | 34 | 2 | 26 | 1,330 | 98 | 18 | 5 | 3 | 2 | 2 |
| 5 | 1.5 | 12 | 34 | 3 | 14 | 1,190 | 83 | 16 | 5 | 3 | 2 | 2 |
| 6 | 1.6 | 12 | 34 | 5 | 18 | 940 | 71 | 12 | 5 | 3 | 2 | 2 |
| 7 | 1.7 | 12 | 34 | 4 | 18 | 770 | 58 | 9 | 4 | 3 | 2 | 2 |
| 8 | 1.8 | 12 | 34 | 4 | 18 | 745 | 49 | 7 | 4 | 3 | 2 | 2 |
| 9 | 1.9 | 12 | 34 | 2 | 18 | 770 | 43 | 5 | 4 | 3 | 2 | 2 |
| 10 | 2.0 | 12 | 34 | 2 | 18 | 770 | 38 | 3 | 3 | 3 | 2 | 2 |
| 11 | 1.9 | 12 | 34 | 2 | 22 | 795 | 38 | 2 | 3 | 3 | 2 | 2 |
| 12 | 1.8 | 12 | 34 | 2 | 25 | 820 | 43 | 2 | 3 | 2 | 3 | 2 |
| 13 | 1.8 | 12 | 32 | 2 | 78 | 770 | 30 | 1 | 3 | 2 | 3 | 2 |
| 14 | 1.7 | 12 | 32 | 2 | 46 | 770 | 20 | 0 | 3 | 2 | 3 | 3 |
| 15 | 1.7 | 12 | 30 | 2 | 42 | 720 | 15 | 0 | 3 | 2 | 3 | 3 |
| 16 | 1.6 | 12 | 28 | 2 | 28 | 690 | 12 | 0 | 4 | 2 | 3 | 3 |
| 17 | 1.5 | 12 | 28 | 2 | 25 | 670 | 9 | 0 | 5 | 2 | 3 | 3 |
| 18 | 1.6 | 12 | 26 | 2 | 14 | 720 | 7 | 1 | 5 | 2 | 3 | 3 |
| 19 | 1.9 | 54 | 24 | 2 | 11 | 810 | 5 | 7 | 5 | 2 | 3 | 3 |
| 20 | 2.2 | 206 | 22 | 2 | 11 | 516 | 4 | 8 | 4 | 2 | 3 | 4 |
| 21 | 2.3 | 1,180 | 19 | 26 | 11 | 380 | 3 | 9 | 4 | 2 | 3 | 4 |
| 22 | 2.6 | 1,600 | 16 | 770 | 11 | 447 | 3 | 9 | 4 | 2 | 3 | 4 |
| 23 | 2.9 | 1,570 | 13 | 820 | 11 | 464 | 3 | 8 | 4 | 2 | 3 | 3 |
| 24 | 3.0 | 900 | 11 | 238 | 26 | 334 | 2 | 7 | 4 | 2 | 2 | 3 |
| 25 | 3.0 | 622 | 9 | 152 | 192 | 306 | 2 | 7 | 3 | 2 | 2 | 3 |
| 26 | 4.0 | 330 | 7 | 90 | 134 | 239 | 1 | 8 | 3 | 2 | 2 | 3 |
| 27 | 4.0 | 168 | 7 | 134 | 172 | 231 | 1 | 8 | 3 | 2 | 2 | 3 |
| 28 | 5.0 | 134 | 7 | 134 | 1,060 | 184 | 1 | 7 | 2 | 2 | 2 | 3 |
| 29 | 5.0 | 66 | 7 | 172 | ...... | 144 | 1 | 7 | 2 | 2 | 2 | 3 |
| 30 | 6.0 | 34 | 7 | 182 | ...... | 133 | 3 | 6 | 2 | 2 | 2 | 3 |
| 31 | 6.0 | ...... | 7 | 124 | ...... | 131 | ...... | 7 | ...... | 2 | 2 | ...... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 3 | 5 | 160 | 5.7 | 0.1 | 1.7 | 1,900 | 106 | 12 | 5.7 | 0.6 | 0.4 |
| 2 | 3 | 5 | 447 | 5.5 | .1 | 1.8 | 1,450 | 95 | 10 | 5.4 | .6 | .7 |
| 3 | 3 | 5 | 940 | 5.5 | .1 | 1.9 | 879 | 92 | 10 | 4.8 | .6 | .7 |
| 4 | 5 | 5 | 508 | 5.5 | .2 | 2.0 | 938 | 85 | 9.9 | 4.3 | .7 | .7 |
| 5 | 5 | 5 | 306 | 5.0 | .2 | 4.8 | 1,640 | 92 | 9.1 | 3.9 | .7 | 1.1 |
| 6 | 5 | 5 | 202 | 4.0 | .2 | 23 | 1,060 | 112 | 9.6 | 3.4 | .7 | 1.4 |
| 7 | 4 | 5 | 122 | 3.3 | .2 | 13 | 823 | 99 | 13 | 3.2 | .7 | 1.4 |
| 8 | 4 | 8 | 720 | 2.5 | .2 | 17 | 626 | 87 | 14 | 2.5 | .7 | 1.3 |
| 9 | 3 | 7 | 820 | 2.2 | .2 | 23 | 582 | 80 | 14 | 1.9 | .7 | 1.5 |
| 10 | 3 | 6 | 1,370 | 1.7 | .2 | 39 | 362 | 68 | 11 | 1.5 | .7 | 1.4 |
| 11 | 3 | 7 | 413 | 1.5 | .2 | 34 | 393 | 56 | 8.7 | 1.5 | 1.1 | 1.3 |
| 12 | 5 | 7 | 160 | 1.4 | .2 | 34 | 370 | 44 | 5.7 | 1.5 | 1.5 | 1.3 |
| 13 | 5 | 7 | 122 | 1.2 | .2 | 39 | 345 | 35 | 4.3 | 1.5 | 1.8 | 1.3 |
| 14 | 5 | 7 | 109 | 1.1 | .2 | 50 | 320 | 29 | 6.9 | 1.4 | 1.7 | 1.3 |
| 15 | 5 | 6 | 98 | .4 | .2 | 56 | 296 | 25 | 4.8 | 1.5 | 1.3 | 1.3 |
| 16 | 5 | 6 | 68 | .2 | .2 | 86 | 426 | 23 | 4.8 | 1.5 | .9 | 1.5 |
| 17 | 5 | 6 | 53 | .2 | .2 | 127 | 426 | 30 | 7.1 | 1.4 | .7 | 1.7 |
| 18 | 5 | 7 | 36 | .2 | .2 | 144 | 356 | 73 | 4.3 | 1.5 | .7 | 2.2 |
| 19 | 5 | 7 | 38 | .2 | .2 | 126 | 268 | 81 | 3.4 | 1.5 | .7 | 2.5 |
| 20 | 5 | 10 | 38 | .2 | .3 | 231 | 275 | 68 | 2.9 | 1.3 | .7 | 2.5 |
| 21 | 5 | 10 | 38 | .2 | .5 | 393 | 293 | 50 | 2.6 | 1.3 | .7 | 2.6 |
| 22 | 5 | 12 | 38 | .2 | .6 | 823 | 290 | 34 | 2.9 | .7 | .7 | 2.7 |
| 23 | 5 | 76 | 38 | .2 | .9 | 1,440 | 275 | 23 | 5.4 | .7 | .7 | 2.6 |
| 24 | 5 | 160 | 38 | .2 | 1.0 | 1,640 | 231 | 13 | 5.5 | .7 | .7 | 2.6 |
| 25 | 5 | 191 | 10 | .2 | 1.2 | 1,560 | 207 | 12 | 5.2 | .7 | .7 | 2.3 |
| 26 | 5 | 160 | 10 | .2 | 1.3 | 1,300 | 182 | 12 | 5.4 | .8 | .7 | 4.2 |
| 27 | 5 | 160 | 10 | .2 | 1.5 | 1,560 | 180 | 13 | 5.5 | .7 | .6 | 4.2 |
| 28 | 5 | 106 | 10 | .2 | 1.6 | 1,720 | 182 | 10 | 5.2 | .7 | .6 | 4.0 |
| 29 | 5 | 136 | 9 | .2 | ...... | 1,770 | 146 | 9.1 | 4.8 | .6 | .6 | 4.0 |
| 30 | 5 | 122 | 9 | .2 | ...... | 1,900 | 120 | 9.4 | 4.8 | .6 | .5 | 4.0 |
| 31 | 5 | ...... | 5 | .1 | ...... | 2,070 | ...... | 7.9 | ...... | .6 | .4 | ...... |

*Daily discharge, in second-feet, of Miller Creek near Lorella, Oreg., for 1909–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 4.0 | 7.7 | 7.7 | 18 | 66 | 30 | 86 | 626 | 16 |
| 2 | 4.0 | 7.7 | 7.7 | 19 | 59 | 39 | 86 | 770 | 12 |
| 3 | 4.2 | 7.7 | 7.7 | 19 | 60 | 59 | 86 | 686 | 8.2 |
| 4 | 4.4 | 7.7 | 7.7 | 15 | 66 | 74 | 86 | 426 | 7.3 |
| 5 | 4.8 | 7.9 | 7.7 | 13 | 144 | 74 | 86 | 288 | 3.6 |
| 6 | 5.0 | 8.2 | 7.9 | 13 | 127 | 74 | 86 | 288 | 2.0 |
| 7 | 5.4 | 8.4 | 8.2 | 13 | 127 | 74 | 86 | 287 | 1.7 |
| 8 | 5.2 | 9.1 | 8.2 | 13 | 320 | 74 | 105 | 141 | 2.0 |
| 9 | 5.4 | 12 | 10 | 13 | 302 | 60 | 108 | 100 | 5.7 |
| 10 | 5.4 | 12 | 10 | 13 | 386 | 67 | 112 | 84 | 3.7 |
| 11 | 5.5 | 13 | 10 | 13 | 286 | 52 | 176 | 70 | 2.0 |
| 12 | 5.6 | 13 | 10 | 29 | 148 | 47 | 163 | 62 | 1.5 |
| 13 | 5.6 | 13 | 10 | 52 | 109 | 68 | 136 | 50 | 2.5 |
| 14 | 5.7 | 12 | 10 | 66 | 118 | 59 | 126 | 49 | 2.3 |
| 15 | 6.0 | 12 | 10 | 61 | 353 | 37 | 142 | 25 | 4.3 |
| 16 | 6.3 | 17 | 11 | 44 | 2,670 | 48 | 90 | 18 | 7.3 |
| 17 | 6.6 | 19 | 11 | 37 | 2,580 | 56 | 91 | 16 | 4.8 |
| 18 | 6.9 | 16 | 11 | 29 | 720 | 90 | 111 | 13 | 2.0 |
| 19 | 7.2 | 13 | 11 | 26 | 207 | 107 | 80 | 12 | 1.5 |
| 20 | 7.5 | 11 | 11 | 29 | 52 | 86 | 80 | 11 | .7 |
| 21 | 7.7 | 10 | 11 | 26 | 50 | 68 | 66 | 15 | .6 |
| 22 | 7.7 | 9.6 | 15 | 48 | 50 | 62 | 74 | 29 | 1.1 |
| 23 | 7.7 | 9.6 | 20 | 59 | 50 | 86 | 80 | 40 | 2.5 |
| 24 | 7.7 | 9.6 | 29 | 159 | 29 | 112 | 86 | 49 | 3.0 |
| 25 | 7.7 | 7.7 | 30 | 1,080 | 29 | 112 | 90 | 50 | 3.6 |
| 26 | 7.7 | 7.7 | 30 | 770 | 29 | 109 | 112 | 55 | 4.8 |
| 27 | 7.7 | 7.7 | 30 | 265 | 18 | 107 | 130 | 55 | 9.6 |
| 28 | 7.7 | 7.7 | 30 | 184 | 20 | 107 | 102 | 40 | 10.4 |
| 29 | 7.7 | 7.7 | 34 | 127 | 23 | 107 | 202 | 41 | 10.4 |
| 30 | 7.7 | 7.7 | 28 | 92 | ........ | 109 | 582 | 24 | 10 |
| 31 | 7.7 | ........ | 23 | 80 | ........ | 86 | ........ | 17 | ........ |

NOTE.—Discharge determined from fairly well defined rating curves applicable as follows: Jan. 1 to Dec. 31, 1909; Jan. 1 to Feb. 28, 1910; Mar. 1 to Dec. 31, 1910; Jan. 1, 1911, to June 30, 1912. On days when gage was not read the discharge was interpolated or estimated from hydrographs of neighboring streams. Discharge below 10 second-feet are only approximate.

*Monthly discharge of Miller Creek near Lorella, Oreg., for 1904–1911.*

[Drainage area, 270 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| 1904. | | | | | | | |
| August | 1.5 | .75 | 1.3 | ........ | ........ | 79 | |
| September | 1.5 | .0 | .2 | ........ | ........ | 12 | |
| 1904–5. | | | | | | | |
| October | 8 | 1.5 | 2.4 | ........ | ........ | 148 | |
| November | 8 | 1.5 | 3.7 | ........ | ........ | 221 | |
| December | 10.5 | 1.5 | 6.2 | ........ | ........ | 381 | |
| January | 613 | 8 | 179 | ........ | ........ | 11,010 | |
| February | 561 | 13 | 138 | ........ | ........ | 7,664 | |
| March | 411 | 52 | 153 | ........ | ........ | 9,408 | |
| April | 460 | 4 | 71.0 | ........ | ........ | 4,225 | |
| May | 13 | 0 | 6.5 | ........ | ........ | 400 | |
| June | 8 | 0 | 3.0 | ........ | ........ | 179 | |
| July | 0 | 0 | .0 | ........ | ........ | 0 | |
| August | 0 | 0 | .0 | ........ | ........ | 0 | |
| September | 0 | 0 | .0 | ........ | ........ | 0 | |
| The year | 613 | 0 | 46.9 | ........ | ........ | 33,600 | |

*Monthly discharge of Miller Creek near Lorella, Oreg., for 1904–1911*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1905-6.** | | | | | | | |
| October | 0 | 0 | 0 | | | 0 | |
| November | 0 | 0 | 0 | | | 0 | |
| December | 0 | 0 | 0 | | | 0 | |
| January | 13 | 4 | 7.7 | | | 474 | B. |
| February | 52 | 4 | 11.5 | | | 639 | B. |
| March | 1,680 | 39 | 445 | | | 27,400 | A. |
| April | 2,380 | 136 | 779 | | | 46,400 | A. |
| May | 245 | 13 | 56.7 | | | 3,490 | A. |
| June | 168 | 1.5 | 47.3 | | | 2,810 | B. |
| July | 2.8 | 0 | .3 | | | 18 | C. |
| August | 0 | 0 | 0 | | | 0 | |
| September | 0 | 0 | 0 | | | 0 | |
| The year | 2,380 | 0 | 112 | | | 81,200 | |
| **1906-7.** | | | | | | | |
| October | 0 | 0 | 0 | | | 0 | |
| November | 1.5 | 0 | .6 | | | 36 | C. |
| December | 685 | 1.5 | 68.1 | | | 4,190 | A. |
| January | 464 | 1.7 | 24.3 | | | 1,490 | B. |
| February | 6,730 | 138 | 1,020 | | | 56,600 | A. |
| March | 2,080 | 138 | 543 | | | 33,400 | A. |
| April | 1,800 | 59 | 448 | | | 26,700 | B. |
| May | 60 | 9.5 | 39.0 | | | 2,400 | A. |
| June | 90 | 1.5 | 26.6 | | | 1,580 | B. |
| July | 1.3 | 0 | .17 | | | 10.4 | C. |
| August | 0 | 0 | 0 | | | 0 | |
| September | 0 | 0 | 0 | | | 0 | |
| The year | 6,730 | 0 | 181 | | | 126,000 | |
| **1907-8.** | | | | | | | |
| October | 5 | 0 | .80 | | | 49.2 | C. |
| November | 5 | 1.7 | 3.02 | | | 180 | C. |
| December | 490 | 1.7 | 71.9 | | | 4,420 | B. |
| January | 206 | 16.6 | 95.4 | | | 5,870 | B. |
| February | 25 | .3 | 10.1 | | | 581 | C. |
| March | 290 | 28 | 123 | | | 7,560 | B. |
| April | 46 | 1.7 | 17.5 | | | 1,040 | B. |
| May | 35 | 0 | 13.9 | | | 855 | B. |
| June | 7 | 0 | .39 | | | 23 | C. |
| July | 0 | 0 | 0 | | | 0 | |
| August | 0 | 0 | 0 | | | 0 | |
| September | 0 | 0 | 0 | | | 0 | |
| The year | 490 | 0 | 28.0 | | | 20,600 | |
| **1908-9.** | | | | | | | |
| October | 0 | 0 | 0 | | | 0 | |
| November | | 0 | .48 | | | 29 | D. |
| December | | | .56 | | | 34 | D. |
| January | | | 204 | 0.756 | 0.87 | 12,500 | D. |
| February | | | 242 | .896 | .93 | 13,400 | D. |
| March | | | 387 | 1.43 | 1.65 | 23,800 | C. |
| April | | | 254 | .941 | 1.05 | 15,100 | C. |
| May | 49 | 5.6 | 16.1 | .060 | .07 | 990 | B. |
| June | 26 | 3.9 | 9.56 | .035 | .04 | 569 | B. |
| July | | | 2.16 | .0080 | .01 | 133 | C. |
| August | | | 3.21 | .012 | .01 | 197 | C. |
| September | | | 1.47 | .0054 | .006 | 87 | C. |
| The year | | | 93.4 | | | 66,800 | |
| **1909-10.** | | | | | | | |
| October | | | 2.51 | .0093 | .01 | 154 | C. |
| November | | | 235 | .870 | .97 | 14,000 | C. |
| December | | | 23.9 | .088 | .10 | 1,470 | C. |
| January | 820 | 2 | 92.6 | .343 | .40 | 5,690 | C. |
| February | 1,060 | 11 | 82.3 | .305 | .32 | 4,570 | B. |
| March | 2,620 | 131 | 705 | 2.61 | 3.01 | 43,300 | A. |
| April | 148 | 1 | 34.1 | .126 | .14 | 2,030 | B. |
| May | 18 | 0 | 6.5 | .024 | .03 | 400 | C. |
| June | 8 | 2 | 4.1 | .015 | .02 | 244 | C. |
| July | 3 | 2 | 2.4 | .0089 | .01 | 148 | C. |
| August | 3 | 2 | 2.4 | .0089 | .01 | 148 | C. |
| September | 4 | 2 | 2.7 | .010 | .01 | 161 | C. |
| The year | 2,620 | 0 | 90.5 | .368 | 5.03 | 72,300 | |

*Monthly discharge of Miller Creek near Lorella, Oreg., for 1904–1911*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1910–11.** | | | | | | | |
| October | 5 | 3 | 4.5 | 0.017 | 0.02 | 277 | C. |
| November | 191 | 5 | 42 | .156 | .17 | 2,500 | B. |
| December | 1,370 | 5 | 244 | .830 | .96 | 13,800 | B. |
| January | 5.7 | .1 | 1.60 | .0059 | .007 | 98.4 | D. |
| February | 1.6 | .1 | .44 | .0016 | .002 | 24 | D. |
| March | 2,070 | 1.7 | 556 | 2.06 | 2.38 | 34,200 | A. |
| April | 1,900 | 120 | 529 | 1.96 | 2.19 | 31,500 | A. |
| May | 112 | 7.9 | 50.8 | .188 | .22 | 3,120 | C. |
| June | 14 | 2.6 | 7.09 | .026 | .03 | 422 | D. |
| July | 5.7 | .6 | 1.91 | .0071 | .01 | 117 | D. |
| August | 1.8 | .4 | .80 | .0030 | .003 | 49 | D. |
| September | 4.2 | .4 | 2.06 | .076 | .08 | 123 | D. |
| The year | 2,070 | .1 | 120 | .444 | 6.07 | 86,200 | |
| **1911–12.** | | | | | | | |
| October | 7.7 | 4 | 6.30 | .023 | .03 | 388 | D. |
| November | 19 | 7.7 | 10.4 | .038 | .04 | 619 | D. |
| December | 39 | 7.7 | 17.2 | .064 | .07 | 1,060 | D. |
| January | 1,000 | 13 | 108 | .400 | .46 | 6,640 | B. |
| February | 2,520 | 18 | 296 | 1.10 | 1.19 | 17,000 | B. |
| March | 112 | 30 | 75.5 | .280 | .32 | 4,640 | B. |
| April | 582 | 68 | 122 | .452 | .50 | 7,260 | B. |
| May | 770 | 11 | 140 | .519 | .60 | 8,610 | B. |
| June | 16 | .6 | 4.95 | .018 | .02 | 295 | C. |
| The period | | | | | | 46,500 | |

## SHASTA RIVER AT MONTAGUE, CAL.

This station, which is located at the highway bridge at Lucas ranch, in the N. ½ NE. ¼ sec. 33, T. 45 N., R. 6 W., 1¼ miles southwest of Montague, was established August 24, 1911. Little Shasta River enters 1 mile above and Yreka Creek 5 miles below the station.

The gage is painted on upstream caisson of the bridge pier on the right bank with a vertical staff for low water on the same pier. Discharge measurements are made from upstream side of bridge or by wading.

The channel is composed of bowlders and gravel.

Water is diverted above the station for irrigation and for use in power development.

Estimates of discharge are withheld until additional data are secured.

*Discharge measurements of Shasta River at Montague, Cal., in 1911–12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Aug. 24 | Harry Barnes | 2.80 | 102 | Jan. 24 | H. J. Tompkins | 2.98 | 322 |
| Sept. 3 | G. T. Peekema | 2.75 | 126 | May 21 | Lesley Lee | 3.50 | 344 |
| Oct. 25 | Harry Barnes | 2.82 | 158 | 22 | .....do | 3.61 | 352 |
| | | | | 28 | .....do | 3.34 | 298 |

*Daily gage height, in feet, of Shasta River at Montague, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | | 2.65 | 2.85 | 3.0 | 2.95 | 3.1 | 3.0 | 2.8 | 4.0 | 3.35 |
| 2 | | 2.7 | 2.85 | 3.0 | 2.9 | 3.1 | 2.95 | 2.8 | 3.6 | 3.3 |
| 3 | 2.75 | 2.7 | 2.9 | 3.0 | 2.9 | 3.1 | 2.95 | 2.8 | 3.6 | 3.3 |
| 4 | 2.75 | 2.7 | 2.9 | 3.0 | 2.9 | 3.1 | 2.95 | 2.8 | 3.4 | 3.3 |
| 5 | 2.8 | 2.7 | 2.9 | 3.0 | 2.9 | 3.35 | 3.0 | 2.8 | 3.4 | 3.3 |
| 6 | 2.8 | 2.7 | 2.9 | 3.0 | 2.9 | 3.05 | 3.3 | 2.8 | | 3.0 |
| 7 | 2.75 | 2.7 | 2.9 | 3.0 | 2.9 | 3.05 | 3.3 | 2.8 | | 3.0 |
| 8 | 2.75 | 2.7 | 2.9 | 3.0 | 3.0 | 3.05 | 3.3 | 2.8 | | 3.0 |
| 9 | 2.75 | 2.8 | 2.9 | 3.0 | 3.15 | 3.1 | 3.1 | 2.8 | | 3.4 |
| 10 | 2.8 | 2.85 | 2.9 | 3.0 | 3.15 | 3.1 | 3.05 | 2.8 | | 3.2 |
| 11 | 2.8 | 2.8 | 2.95 | 3.0 | 3.15 | 3.1 | 3.1 | 2.8 | | 3.2 |
| 12 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.1 | 3.05 | 2.9 | 3.2 | 3.2 |
| 13 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.35 | 3.1 | 2.85 | 3.1 | 3.2 |
| 14 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.35 | 3.1 | 2.85 | 3.1 | 3.2 |
| 15 | 2.75 | 2.8 | 2.95 | 3.0 | 3.15 | 3.05 | 3.1 | 2.9 | 3.1 | 3.2 |
| 16 | 2.75 | 2.8 | 2.95 | 3.0 | 3.1 | 3.3 | 3.1 | 2.9 | 3.1 | 3.0 |
| 17 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.7 | 3.1 | 2.8 | 3.0 | 3.0 |
| 18 | 2.8 | 2.8 | 3.0 | 3.0 | 3.1 | 4.0 | 3.1 | 2.8 | 3.1 | 3.0 |
| 19 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.6 | 3.1 | 2.8 | 3.2 | 2.8 |
| 20 | 2.8 | 2.8 | 3.0 | 3.0 | 3.1 | 3.2 | 3.05 | 2.8 | 3.3 | 2.8 |
| 21 | 2.8 | 2.8 | 2.95 | 2.95 | 3.0 | 3.2 | 3.05 | 2.8 | 3.5 | 3.0 |
| 22 | 2.8 | 2.8 | 2.95 | 3.0 | 3.0 | 3.1 | 3.0 | 2.8 | 3.6 | 3.2 |
| 23 | 2.8 | 2.8 | 3.0 | 3.0 | 3.0 | 3.1 | 3.05 | 2.8 | 3.5 | 3.5 |
| 24 | 2.7 | 2.8 | 3.0 | 3.0 | 3.0 | 3.05 | 3.0 | 2.9 | 3.4 | 3.8 |
| 25 | 2.7 | 2.8 | 3.0 | 3.0 | | 3.0 | 3.0 | 2.9 | 3.35 | 3.6 |
| 26 | 2.75 | 2.85 | 3.0 | 3.0 | | 3.0 | 3.0 | 2.9 | 3.3 | 3.2 |
| 27 | 2.75 | 2.85 | 3.0 | 3.0 | | 3.0 | 2.9 | 2.8 | 3.3 | 3.35 |
| 28 | 2.6 | 2.85 | 3.0 | 3.0 | 3.3 | 3.0 | 2.9 | 2.9 | 3.35 | 3.0 |
| 29 | 2.6 | 2.85 | 3.0 | 2.95 | 3.3 | 3.0 | 2.9 | 3.4 | 3.35 | 3.0 |
| 30 | 2.6 | 2.85 | 3.0 | 2.95 | 3.2 | | 2.95 | 3.7 | 3.35 | 3.1 |
| 31 | | 2.85 | | 2.95 | 3.2 | | 2.8 | | 3.35 | |

Note.—Jan. 25, maximum recorded gage height 23.0 feet at 9 a. m.

## EAST FORK OF SCOTT RIVER NEAR CALLAHAN, CAL.

Scott River rises in the Scott Mountains in the southern part of Siskiyou County, and flows northwestward to its junction with Klamath River near Hamburg Bar. The length of the main river from the junction of the South and East forks near Callahan is about 50 miles. The basin is narrow and the tributaries are small. Scott Valley, extending from Fort Jones to French Gulch, is a rich agricultural valley. Below this valley the river enters a canyon in which it continues to its mouth.

The gaging station, which is located 500 feet west of W. Schneider's ranch house, 6 miles east of Callahan, in sec. 18., T. 40 N., R. 7 W., in the Shasta National Forest, was established November 1, 1910.

The gage is a vertical staff fastened to a willow tree on the left bank.

Discharge measurements are made from the foot log 30 feet below the gage.

This station is maintained in cooperation with the United States Forest Service.

*Daily gage height, in feet, of Miller Creek near Lorella, Oreg., for 1904–1913*—Continued.

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|
| 1906. | | | | | | | |
| 1 | 6.2 | 6.3 | 7.0 | 8.1 | 7.0 | 7.2 | [illegible] |
| 2 | 6.2 | 6.3 | 7.1 | 8.1 | 7.0 | 7.0 | [illegible] |
| 3 | 6.2 | 6.3 | 7.1 | 8.4 | 6.9 | 6.9 | [illegible] |
| 4 | 6.2 | 6.3 | 7.05 | 8.15 | 6.8 | 6.9 | [illegible] |
| 5 | 6.2 | 6.3 | 7.0 | 9.2 | 6.7 | 7.0 | [illegible] |
| 6 | 6.2 | 6.3 | 7.05 | 9.5 | 6.7 | 7.3 | [illegible] |
| 7 | 6.3 | 6.3 | 7.2 | 9.9 | 6.7 | 7.2 | 6.0 |
| 8 | 6.3 | 6.3 | 7.5 | 9.9 | 6.6 | 7.2 | 6.0 |
| 9 | 6.4 | 6.3 | 7.7 | 10.5 | 6.6 | 7.1 | ........ |
| 10 | 6.4 | 6.3 | 7.8 | 10.0 | 6.5 | 7.0 | ........ |
| 11 | 6.4 | 6.3 | 7.7 | 9.1 | 6.5 | 6.9 | ........ |
| 12 | 6.3 | 6.3 | 7.6 | 8.8 | 6.5 | 6.8 | ........ |
| 13 | 6.3 | 6.3 | 7.5 | 8.8 | 6.6 | 6.8 | ........ |
| 14 | 6.3 | 6.3 | 7.3 | 8.7 | 6.7 | 6.7 | ........ |
| 15 | 6.3 | 6.3 | 7.1 | 8.7 | 6.7 | 6.6 | ........ |
| 16 | 6.3 | 6.3 | 6.9 | 8.9 | 6.7 | 6.5 | ........ |
| 17 | 6.3 | 6.3 | 6.7 | 8.5 | 6.7 | 6.5 | ........ |
| 18 | 6.3 | 6.3 | 6.7 | 8.1 | 6.6 | 6.4 | ........ |
| 19 | 6.3 | 6.3 | 6.7 | 7.9 | 6.6 | 6.4 | ........ |
| 20 | 6.3 | 6.3 | 6.7 | 7.8 | 6.5 | 6.3 | ........ |
| 21 | 6.3 | 6.3 | 7.2 | 7.7 | 6.5 | 6.3 | ........ |
| 22 | 6.3 | 6.3 | 7.8 | 7.5 | 6.5 | 6.2 | ........ |
| 23 | 6.3 | 6.3 | 8.3 | 7.5 | 6.5 | 6.2 | ........ |
| 24 | 6.3 | 6.2 | 8.8 | 7.4 | 6.5 | 6.1 | ........ |
| 25 | 6.3 | 6.4 | 9.7 | 7.5 | 6.4 | 6.1 | ........ |
| 26 | 6.3 | 6.6 | 9.0 | 7.4 | 6.5 | 6.1 | ........ |
| 27 | 6.3 | 6.7 | 8.6 | 7.3 | 6.8 | 6.1 | ........ |
| 28 | 6.3 | 6.8 | 8.65 | 7.4 | 7.1 | 6.15 | ........ |
| 29 | 6.3 | ........ | 8.65 | 7.4 | 7.5 | 6.15 | ........ |
| 30 | 6.3 | ........ | 9.7 | 7.2 | 7.5 | 6.15 | ........ |
| 31 | 6.3 | ........ | 9.6 | ........ | 7.4 | ........ | ........ |

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. |
|---|---|---|---|---|---|---|---|---|---|
| 1906–7. | | | | | | | | | |
| 1 | ........ | 6.1 | 6.45 | 7.70 | 7.30 | ........ | 6.77 | 6.28 | ........ |
| 2 | ........ | 6.1 | 6.20 | 8.90 | 7.30 | ........ | 6.73 | 6.25 | ........ |
| 3 | ........ | 6.1 | 6.10 | 11.55 | 7.25 | ........ | 6.70 | 6.24 | ........ |
| 4 | ........ | 6.1 | 6.10 | 13.00 | 7.20 | ........ | 6.70 | 6.20 | ........ |
| 5 | ........ | 6.2 | 6.10 | 14.00 | 7.35 | ........ | 6.68 | 6.18 | ........ |
| 6 | ........ | 6.2 | 6.10 | 12.00 | 7.40 | 8.10 | 6.65 | 6.22 | 6.10 |
| 7 | ........ | 6.35 | 6.10 | 10.00 | 7.40 | 9.50 | 6.65 | ........ | ........ |
| 8 | ........ | 6.4 | 6.10 | 7.70 | 7.85 | ........ | 6.65 | 6.35 | ........ |
| 9 | ........ | 6.3 | 6.10 | 7.85 | 7.90 | ........ | 6.63 | ........ | ........ |
| 10 | ........ | 6.3 | 6.10 | 7.65 | 7.55 | ........ | 6.58 | ........ | ........ |
| 11 | ........ | 6.3 | 6.10 | 7.55 | 7.50 | ........ | 6.70 | ........ | ........ |
| 12 | ........ | 6.2 | 6.10 | 7.45 | 7.30 | ........ | 6.78 | ........ | ........ |
| 13 | ........ | 6.2 | 6.10 | 7.30 | 7.35 | 8.00 | 6.81 | ........ | ........ |
| 14 | ........ | 6.2 | 6.10 | 7.25 | 7.20 | ........ | 6.75 | ........ | ........ |
| 15 | ........ | 6.2 | 6.10 | 7.20 | 7.20 | ........ | 6.66 | 7.00 | ........ |
| 16 | ........ | 6.2 | 6.10 | 7.20 | 7.28 | ........ | 6.58 | ........ | ........ |
| 17 | ........ | 6.2 | 6.10 | 7.36 | 8.09 | ........ | 6.50 | ........ | ........ |
| 18 | 6.1 | 6.2 | 6.10 | 7.50 | 9.80 | ........ | 6.50 | ........ | ........ |
| 19 | 6.1 | 6.2 | 6.10 | 7.40 | 10.15 | ........ | 6.58 | ........ | ........ |
| 20 | 6.1 | 6.25 | 6.10 | 7.35 | 9.80 | 7.10 | 6.62 | ........ | ........ |
| 21 | 6.1 | 6.3 | 6.10 | 7.30 | 9.40 | 7.10 | 6.65 | ........ | ........ |
| 22 | 6.1 | 6.3 | 6.10 | 8.00 | 9.00 | 7.10 | 6.75 | 6.30 | ........ |
| 23 | 6.1 | 6.4 | 6.20 | 7.80 | 8.70 | 7.05 | 6.70 | ........ | ........ |
| 24 | 6.1 | 6.6 | 6.20 | 7.40 | 8.30 | 7.00 | ........ | ........ | ........ |
| 25 | 6.1 | 7.65 | 6.30 | 7.80 | 7.90 | 7.00 | 6.70 | ........ | ........ |
| 26 | 6.1 | 8.35 | 6.30 | 7.85 | 7.60 | 6.95 | 6.65 | ........ | 5.70 |
| 27 | 6.1 | 7.95 | 6.30 | 7.70 | 7.75 | 6.90 | 6.57 | ........ | ........ |
| 28 | 6.1 | 7.4 | 6.30 | 7.40 | 7.68 | 6.88 | 6.49 | ........ | ........ |
| 29 | 6.1 | 7.4 | 6.65 | ........ | 7.95 | 6.85 | 6.42 | 6.10 | ........ |
| 30 | 6.1 | 6.8 | 7.20 | ........ | 8.50 | 6.90 | 6.35 | ........ | ........ |
| 31 | ........ | 6.6 | 7.95 | ........ | 8.40 | ........ | 6.28 | ........ | ........ |

*Daily gage height, in feet, of Miller Creek near Lorella, Oreg., for 1904-1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1907-8. | | | | | | | | | |
| 1 | | 6.18 | | | 6.20 | | 6.70 | 6.10 | |
| 2 | | 6.20 | | | | | 6.70 | 6.07 | |
| 3 | | 6.20 | | | | | 6.60 | 6.05 | 6.00 |
| 4 | | 6.20 | | 6.50 | | | 6.50 | 6.04 | |
| 5 | | 6.19 | | | | | 6.50 | 6.05 | |
| 6 | | 6.19 | | | | | 6.51 | 6.09 | |
| 7 | | 6.18 | 6.20 | | | 6.70 | 6.55 | 6.09 | 5.90 |
| 8 | | | | | 6.20 | | 6.54 | 6.05 | |
| 9 | | 6.10 | | | 6.16 | | 6.50 | | |
| 10 | | 6.10 | | | 6.00 | | 6.44 | 6.21 | |
| 11 | | 6.10 | | 6.40 | 6.15 | | 6.40 | 6.22 | |
| 12 | | 6.10 | | | 6.18 | | 6.40 | 6.22 | |
| 13 | | 6.10 | | | 6.20 | | 6.40 | 6.23 | |
| 14 | | 6.10 | 6.10 | | | 7.60 | 6.38 | 6.18 | 5.90 |
| 15 | | 6.10 | | | 6.40 | | 6.36 | 6.12 | |
| 16 | | 6.10 | | | 6.35 | | 6.35 | 5.90 | |
| 17 | | 6.12 | | | 6.30 | | 6.50 | 6.50 | |
| 18 | | 6.11 | | 7.30 | 6.30 | | 6.40 | | |
| 19 | | 6.11 | | 7.30 | 6.30 | 7.60 | 6.39 | | |
| 20 | | 6.11 | | 7.30 | 6.30 | | 6.32 | | |
| 21 | | 6.11 | 6.40 | 7.32 | | 6.90 | 6.28 | | |
| 22 | | 6.16 | | 7.34 | 6.32 | | 6.26 | | |
| 23 | | 6.20 | 8.00 | 7.37 | | | 6.24 | | |
| 24 | | | 8.00 | | | | 6.24 | 6.60 | |
| 25 | | | 7.60 | 7.40 | | | 6.23 | | |
| 26 | 6.12 | | 7.15 | | | | 6.22 | | |
| 27 | 6.15 | | 7.15 | | | | 6.22 | | |
| 28 | 6.20 | | 7.06 | | | 6.70 | 6.16 | | |
| 29 | 6.17 | | | | 6.50 | | 6.10 | | |
| 30 | 6.20 | 6.10 | | | | | | | |
| 31 | 6.20 | | | | | 6.70 | | | |

| Day. | Nov. | Dec. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1908-9. | | | | | | | | | |
| 1 | | 6.01 | | 5.00 | 3.45 | 3.08 | 2.54 | 2.40 | |
| 2 | | | | | 3.37 | 3.06 | 2.52 | | |
| 3 | | | 5.90 | | 3.37 | 3.04 | 2.50 | | |
| 4 | | | | | 3.28 | 3.00 | 2.45 | | |
| 5 | | 6.02 | | | 3.28 | 2.81 | 2.42 | | 2.30 |
| 6 | | | | | 3.28 | 2.81 | 2.30 | | |
| 7 | | | | | 3.27 | 2.75 | 2.35 | | |
| 8 | | | | 5.30 | 3.00 | 2.88 | 2.30 | 2.50 | |
| 9 | | | | | | 2.90 | 2.23 | | |
| 10 | | | | | | 2.86 | 2.20 | | |
| 11 | | | | | | 2.82 | 2.30 | | |
| 12 | | | | | | 2.78 | | | 2.20 |
| 13 | | | | | | 2.75 | | | |
| 14 | | | | | | 2.76 | | | |
| 15 | | | | 5.00 | | 2.90 | | 2.40 | |
| 16 | | | | | 2.66 | 2.92 | | | |
| 17 | | | | | 2.87 | 2.93 | | | |
| 18 | | | | | 2.96 | 3.00 | 2.20 | | 2.13 |
| 19 | | | | | 2.95 | 3.08 | | | 2.12 |
| 20 | | | | | 2.95 | 3.20 | | | |
| 21 | | | | | 2.83 | 3.10 | | | |
| 22 | | | | 4.40 | 2.90 | 3.00 | 2.20 | 2.40 | |
| 23 | | | | | 2.96 | 2.75 | | | |
| 24 | 6.09 | | | | 2.93 | 2.75 | | | |
| 25 | | | | | 2.96 | 2.66 | 2.20 | | |
| 26 | | | 4.90 | | 2.96 | 2.63 | | | 2.10 |
| 27 | | | | | 2.97 | 2.49 | | | |
| 28 | | | | | 2.96 | 2.50 | | | |
| 29 | | | | 3.70 | 3.10 | 2.53 | | 2.40 | |
| 30 | | | | | 3.00 | 2.54 | | | |
| 31 | | | | | 2.98 | | | | |

*Daily gage height, in feet, of Miller Creek near Lorella, Oreg., for 1904–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | | | | 2.20 | 3.95 | 8.50 | 4.24 | 2.85 | 2.95 | 2.68 | 2.60 | [illegible] |
| 2 | | | | 2.40 | 3.75 | 7.10 | 4.10 | 2.98 | 2.96 | 2.70 | 2.60 | [illegible] |
| 3 | 2.20 | | | 2.40 | 3.56 | 6.70 | 4.02 | 3.12 | 2.94 | 2.70 | 2.60 | [illegible] |
| 4 | | | | 2.20 | 3.20 | 7.00 | 3.95 | 3.22 | 2.80 | 2.70 | 2.60 | [illegible] |
| 5 | 2.20 | | 3.30 | 2.40 | 3.00 | 6.80 | 3.85 | 3.18 | 2.78 | 2.70 | 2.60 | [illegible] |
| 6 | | | | 2.60 | 3.08 | 6.40 | 3.76 | 3.08 | 2.78 | 2.70 | 2.58 | [illegible] |
| 7 | | 3.00 | | 2.50 | 3.08 | 6.10 | 3.65 | 2.98 | 2.77 | 2.70 | 2.59 | [illegible] |
| 8 | | | | 2.50 | 3.08 | 6.05 | 3.58 | 2.89 | 2.75 | 2.70 | 2.60 | [illegible] |
| 9 | | | | 2.00 | 3.08 | 6.10 | 3.50 | 2.78 | 2.74 | 2.70 | 2.61 | [illegible] |
| 10 | 2.30 | | | 1.80 | 3.08 | 6.10 | 3.46 | 2.72 | 2.71 | 2.70 | 2.63 | [illegible] |
| 11 | | | | 1.80 | 3.15 | 6.15 | 3.45 | 2.65 | 2.70 | 2.70 | 2.64 | [illegible] |
| 12 | | | 3.30 | 2.00 | 3.18 | 6.20 | 3.50 | 2.59 | 2.70 | 2.65 | 2.66 | [illegible] |
| 13 | | | | 2.30 | 3.70 | 6.10 | 3.37 | 2.48 | 2.70 | 2.65 | 2.68 | [illegible] |
| 14 | | 3.00 | | 2.30 | 3.42 | 6.10 | 3.25 | 2.35 | 2.70 | 2.62 | 2.69 | [illegible] |
| 15 | | | | 2.10 | 3.38 | 6.00 | 3.15 | 2.28 | 2.72 | 2.62 | 2.70 | [illegible] |
| 16 | | | | 1.60 | 3.22 | 5.80 | 3.06 | 2.22 | 2.76 | 2.60 | 2.70 | [illegible] |
| 17 | 2.20 | | | 1.80 | 3.18 | 5.90 | 2.98 | 2.19 | 2.78 | 2.60 | 2.71 | [illegible] |
| 18 | | 3.00 | 3.20 | 1.90 | 3.00 | 6.00 | 2.98 | 2.52 | 2.78 | 2.60 | 2.70 | [illegible] |
| 19 | | 3.50 | | 1.70 | 2.90 | 6.18 | 2.81 | 2.98 | 2.78 | 2.61 | 2.70 | [illegible] |
| 20 | | 4.50 | | 2.00 | 2.98 | 5.54 | 2.74 | 2.96 | 2.76 | 2.63 | 2.70 | [illegible] |
| 21 | | 7.20 | | 3.20 | 2.90 | 5.15 | 2.71 | 2.98 | 2.75 | 2.64 | 2.70 | [illegible] |
| 22 | | 8.05 | | 6.10 | 2.90 | 5.35 | 2.70 | 2.96 | 2.75 | 2.63 | 2.70 | [illegible] |
| 23 | | 8.00 | | 6.20 | 2.90 | 5.40 | 2.68 | 2.92 | 2.75 | 2.60 | 2.66 | [illegible] |
| 24 | 2.40 | 6.60 | | 4.60 | 3.20 | 5.00 | 2.60 | 2.90 | 2.74 | 2.60 | 2.62 | [illegible] |
| 25 | | 5.90 | | 4.20 | 4.40 | 4.90 | 2.55 | 2.91 | 2.70 | 2.60 | 2.59 | [illegible] |
| 26 | | 5.00 | 2.80 | 3.80 | 4.10 | 4.65 | 2.48 | 2.94 | 2.67 | 2.60 | 2.58 | [illegible] |
| 27 | | 4.30 | | 4.10 | 4.30 | 4.62 | 2.50 | 2.92 | 2.66 | 2.60 | 2.60 | [illegible] |
| 28 | | 4.10 | | 4.10 | 6.60 | 4.42 | 2.47 | 2.90 | 2.65 | 2.60 | 2.60 | [illegible] |
| 29 | | 3.60 | | 4.30 | | 4.22 | 2.52 | 2.88 | 2.65 | 2.60 | 2.60 | [illegible] |
| 30 | | 3.30 | | 4.20 | | 4.16 | 2.71 | 2.85 | 2.65 | 2.60 | 2.62 | [illegible] |
| 31 | 2.70 | | | 4.10 | | 4.15 | | 2.80 | | 2.60 | 2.64 | |
| 1910–11. | | | | | | | | | | | | |
| 1 | 2.70 | 2.81 | 4.30 | 2.70 | 2.17 | | 7.70 | 3.96 | 2.98 | 2.70 | 2.27 | [illegible] |
| 2 | 2.69 | 2.81 | 5.35 | 2.69 | 2.16 | | 7.20 | 3.87 | 2.90 | 2.68 | 2.27 | [illegible] |
| 3 | 2.68 | 2.82 | 6.40 | 2.69 | 2.14 | | 6.30 | 3.85 | 2.91 | 2.65 | 2.29 | 2.30 |
| 4 | 2.78 | 2.82 | 5.52 | 2.69 | 2.20 | 2.45 | 6.40 | 3.79 | 2.89 | 2.62 | 2.30 | [illegible] |
| 5 | 2.79 | 2.81 | 4.90 | | 2.20 | 2.65 | 7.40 | 3.86 | 2.86 | 2.59 | 2.30 | [illegible] |
| 6 | 2.78 | 2.81 | 4.50 | | 2.20 | 3.20 | 6.60 | 4.00 | 2.88 | 2.56 | 2.30 | [illegible] |
| 7 | 2.75 | 2.82 | 4.10 | 2.55 | 2.20 | 3.00 | 6.20 | 3.90 | 3.08 | 2.54 | 2.30 | [illegible] |
| 8 | 2.73 | 2.92 | 6.00 | 2.49 | | 3.10 | 5.80 | 3.81 | 3.03 | 2.49 | 2.30 | [illegible] |
| 9 | 2.70 | 2.88 | 6.20 | 2.46 | | 3.20 | 5.70 | 3.75 | 3.03 | 2.44 | 2.30 | [illegible] |
| 10 | 2.70 | 2.87 | 7.05 | 2.42 | | 3.40 | 5.10 | 3.65 | 2.98 | 2.49 | 2.30 | [illegible] |
| 11 | 2.70 | 2.89 | 5.25 | 2.40 | 2.20 | 3.35 | 5.20 | 3.55 | 2.94 | 2.40 | 2.35 | [illegible] |
| 12 | 2.78 | 2.90 | 4.30 | | 2.20 | 3.35 | | 3.45 | 2.70 | 2.40 | 2.40 | [illegible] |
| 13 | 2.80 | 2.89 | 4.10 | | 2.20 | 3.40 | | 3.38 | 2.62 | 2.40 | 2.43 | [illegible] |
| 14 | 2.79 | 2.88 | 4.02 | 2.35 | | 3.50 | | 3.29 | 2.76 | 2.39 | 2.42 | [illegible] |
| 15 | 2.78 | 2.86 | 3.95 | 2.25 | | 3.55 | 4.86 | 3.23 | 2.65 | 2.40 | 2.38 | [illegible] |
| 16 | 2.80 | 2.85 | 3.73 | 2.20 | | 3.80 | 5.30 | 3.20 | 2.65 | 2.40 | 2.32 | [illegible] |
| 17 | 2.80 | 2.87 | 3.60 | 2.20 | | 4.10 | 5.30 | 3.30 | 2.77 | 2.39 | 2.30 | [illegible] |
| 18 | 2.80 | 2.90 | 3.43 | 2.20 | 2.20 | 4.20 | 5.08 | 3.69 | 2.62 | 2.40 | 2.30 | [illegible] |
| 19 | 2.80 | 2.90 | 3.45 | 2.20 | 2.20 | 4.00 | 4.75 | 3.76 | 2.56 | 2.40 | 2.30 | [illegible] |
| 20 | 2.80 | 2.99 | 3.45 | 2.20 | | 4.60 | 4.78 | 3.65 | 2.52 | 2.38 | 2.30 | [illegible] |
| 21 | 2.80 | 3.01 | 3.45 | 2.20 | | 5.20 | 4.85 | 3.50 | 2.59 | 2.38 | 2.30 | 2.30 |
| 22 | 2.80 | 3.05 | 3.45 | | | 6.20 | 4.84 | 3.34 | 2.52 | 2.30 | 2.30 | [illegible] |
| 23 | 2.80 | 3.80 | 3.45 | | | 7.15 | 4.78 | 3.20 | 2.68 | 2.30 | 2.30 | [illegible] |
| 24 | 2.80 | 4.30 | 3.45 | | | 7.40 | 4.60 | 3.08 | 2.69 | 2.30 | 2.30 | [illegible] |
| 25 | 2.80 | 4.45 | 3.00 | | | 7.30 | 4.50 | 2.98 | 2.67 | 2.30 | 2.30 | [illegible] |
| 26 | 2.80 | 4.30 | 3.00 | | | 6.96 | 4.39 | | 2.68 | 2.31 | 2.30 | [illegible] |
| 27 | 2.80 | 4.30 | 2.99 | | | 7.30 | 4.38 | 2.90 | 2.69 | 2.30 | 2.28 | [illegible] |
| 28 | 2.80 | 4.00 | 2.99 | 2.20 | | 7.50 | 4.39 | 2.91 | 2.67 | 2.30 | 2.27 | [illegible] |
| 29 | 2.80 | 4.18 | 2.98 | 2.20 | | 7.55 | 4.21 | 2.86 | 2.65 | 2.28 | 2.27 | [illegible] |
| 30 | 2.80 | 4.10 | 2.96 | 2.20 | | 7.70 | 4.06 | 2.87 | 2.65 | 2.28 | 2.26 | [illegible] |
| 31 | 2.80 | | 2.80 | 2.16 | | 7.90 | | 2.81 | | 2.27 | 2.25 | |

*Daily gage height, in feet, of Miller Creek near Lorella, Oreg., for 1904–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 2.60 | 2.80 | | 3.12 | 3.63 | 3.30 | 3.80 | 5.80 | 3.08 |
| 2 | | 2.80 | 2.80 | 3.13 | 3.50 | 3.40 | 3.80 | 6.10 | 2.98 |
| 3 | | 2.80 | 2.80 | 3.13 | 3.58 | 3.50 | 3.80 | 5.95 | 2.82 |
| 4 | | 2.80 | 2.80 | 3.05 | 3.63 | 3.70 | 3.80 | 5.27 | 2.78 |
| 5 | | 2.81 | 2.80 | 3.00 | 4.20 | 3.70 | 3.80 | 4.75 | 2.57 |
| 6 | | 2.82 | 2.81 | 3.00 | 4.10 | 3.70 | 3.80 | 4.85 | 2.45 |
| 7 | 2.68 | 2.83 | 2.82 | 3.00 | 4.10 | 3.70 | 3.80 | 4.50 | 2.42 |
| 8 | 2.67 | 2.86 | 2.82 | 3.00 | 4.95 | 3.70 | 3.95 | 4.18 | 2.45 |
| 9 | 2.68 | 2.97 | 2.90 | 3.00 | 5.10 | 3 66 | 3.97 | 3.91 | 2.70 |
| 10 | | 2.97 | 2.90 | 3.00 | 5.20 | 3.64 | 4.00 | 3.78 | 2.58 |
| 11 | | 3.00 | 2.90 | 3.00 | 4.86 | 3.52 | 4.36 | 3.67 | 2.45 |
| 12 | | 3.00 | 2.90 | 3.15 | 4.22 | 3.47 | 4.30 | 3.60 | 2.40 |
| 13 | | 3.00 | 2.90 | 3.52 | 3.98 | 3.65 | 4.15 | 3.50 | 2.49 |
| 14 | 2.70 | 2.97 | 2.90 | 3.65 | 4.04 | 3.50 | 4.09 | 3.49 | 2.55 |
| 15 | | 2.98 | 2.90 | 3.59 | 5.00 | 3.38 | 4.19 | 3.23 | 2.62 |
| 16 | | 3.10 | 2.92 | 3.45 | 7.90 | 3.48 | 3.90 | 3.12 | 2.78 |
| 17 | | 3.14 | 2.92 | 3.38 | 8.40 | 3.55 | 3.84 | 3 08 | 2.65 |
| 18 | | 3.07 | 2 93 | 3.27 | 6.00 | 3.90 | 3.99 | 3.00 | 2.53 |
| 19 | | 3.00 | 2.93 | 3.25 | 4.50 | 3.96 | 3.75 | 2.98 | 2.40 |
| 20 | | 2.94 | 2.93 | 3.25 | 3.52 | 3.80 | 3.75 | 2.92 | 2.30 |
| 21 | 2.80 | 2.90 | 2.94 | 3.25 | 3.50 | 3.65 | 3.65 | 3.05 | 2.29 |
| 22 | | 2.88 | 3.05 | 3.48 | 3.50 | 3.60 | 3.70 | 3.28 | 2.35 |
| 23 | | 2.88 | 3.40 | 3.50 | 3.50 | 3.80 | 3.75 | 3.41 | 2.49 |
| 24 | | 2.88 | 3.40 | 4.42 | 3.29 | 4.00 | 3.80 | 3.49 | 2.53 |
| 25 | | 2.80 | 3.40 | 6.50 | 3.29 | 4.00 | 3.90 | 3.50 | 2.53 |
| 26 | | 2.80 | 3.40 | 6.10 | 3.29 | 3.98 | 4.00 | 3.54 | 2.65 |
| 27 | | 2.80 | 3.40 | 4.70 | 3.11 | 3.96 | 4.12 | 3.54 | 2.88 |
| 28 | | 2.80 | | 4.40 | 3.15 | 3.96 | 3.92 | 3.49 | 2.91 |
| 29 | | 2.80 | | 4.10 | 3.20 | 3.96 | 4.48 | 3.42 | 2.91 |
| 30 | | | | 3.85 | | 3.98 | 5.70 | 3.22 | |
| 31 | | | | 3.75 | | 3.80 | | 3.10 | |

NOTE.—River dry June 17 to Dec. 31, 1905; July 7 to Nov. 17, 1906; July 18 to Oct. 25, 1907; and July 1 to Nov. 10, 1908. River freezes over at the gage during the winter, but not at the riffle control, so the discharge is not materially affected. Low gage heights, Jan. 9 to 20, 1910, probably due to low temperature and not low discharge.

*Rating tables for Miller Creek near Lorella, Oreg.*

**August 7, 1904, to December 31, 1905.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 6.00 | 0 | 6.80 | 52 | 7.60 | 274 | 8.40 | 665 |
| 6.10 | 1.5 | 6.90 | 67 | 7.70 | 317 | 8.50 | 717 |
| 6.20 | 4 | 7.00 | 86 | 7.80 | 363 | 8.60 | 770 |
| 6.30 | 8 | 7.10 | 109 | 7.90 | 411 | 8.70 | 823 |
| 6.40 | 13 | 7.20 | 135 | 8.00 | 460 | 8.80 | 876 |
| 6.50 | 20 | 7.30 | 163 | 8.10 | 510 | 8.90 | 929 |
| 6.60 | 29 | 7.40 | 196 | 8.20 | 561 | 9.00 | 982 |
| 6.70 | 39 | 7.50 | 234 | 8.30 | 613 | | |

NOTE.—The above table is based on 13 discharge measurements made during 1904–5, and is well defined between gage heights 6.1 feet and 8 feet.

**January 1 to December 31, 1906.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 7.60 | 290 | 8.40 | 715 | 9.40 | 1,415 |
| | | 7.70 | 337 | 8.50 | 775 | 9.60 | 1,575 |
| | | 7.80 | 387 | 8.60 | 835 | 9.80 | 1,745 |
| | | 7.90 | 437 | 8.70 | 900 | 10.00 | 1,915 |
| 7 20 | 136 | 8.00 | 490 | 8.80 | 965 | 10.20 | 2,085 |
| 7.30 | 168 | 8.10 | 545 | 8.90 | 1,035 | 10.40 | 2,265 |
| 7.40 | 205 | 8.20 | 600 | 9.00 | 1,110 | | |
| 7.50 | 245 | 8.30 | 655 | 9.20 | 1,260 | | |

NOTE.—This table is based on discharge measurements made during 1904–1906 and is well defined. Below gage height 7.20 feet this table is the same as the 1905 table.

*Rating tables for Miller Creek near Lorella, Oreg.*—Continued.

**January 1, 1907, to December 31, 1908.**

| Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* | *Feet.* | *Sec.-feet.* |
| 5.90 | 0 | 7.20 | 138 | 8.50 | 775 | 10.60 | 2.490 |
| 6.00 | 0.3 | 7.30 | 170 | 6.60 | 835 | 10.80 | 2.690 |
| 6.10 | 1.7 | 7.40 | 206 | 8.70 | 900 | 11.00 | 2.900 |
| 6.20 | 5.0 | 7.50 | 246 | 8.80 | 965 | 11.20 | 3.120 |
| 6.30 | 10.0 | 7.60 | 290 | 8.90 | 1,035 | 11.40 | 3,360 |
| 6.40 | 16.6 | 7.70 | 337 | 9.00 | 1,110 | 11.60 | 3.600 |
| 6.50 | 25 | 7.80 | 387 | 9.20 | 1,260 | 11.80 | 3,840 |
| 6.60 | 35 | 7.90 | 437 | 9.40 | 1,415 | 12.00 | 4.080 |
| 6.70 | 46 | 8.00 | 490 | 9.60 | 1,575 | 13.00 | 5,310 |
| 6.80 | 59 | 8.10 | 545 | 9.80 | 1,745 | 14.00 | 6.730 |
| 6.90 | 73 | 8.20 | 600 | 10.00 | 1,920 | | |
| 7.00 | 90 | 8.30 | 655 | 10.20 | 2,100 | | |
| 7.10 | 112 | 8.40 | 715 | 10.40 | 2,290 | | |

NOTE.—Table applicable only to open channel. It is based on discharge measurements made during 1904 to 1908 and is well defined.

*Daily discharge, in second-feet, of Miller Creek near Lorella, Oreg., for 1909–1912.*

| Day. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1909. | | | | | | | | | |
| 1 | 5 | 110 | 560 | 330 | 49 | 17 | 4.4 | 3.0 | [illegible] |
| 2 | 5 | 110 | 590 | 340 | 41 | 16 | 4.2 | 3.1 | [illegible] |
| 3 | 5 | 70 | 622 | 360 | 41 | 14 | 4.0 | 3.3 | [illegible] |
| 4 | 5 | 30 | 680 | 370 | 32 | 12 | 3.5 | 3.5 | [illegible] |
| 5 | 5 | 20 | 740 | 390 | 32 | 7.2 | 3.2 | 3.5 | [illegible] |
| 6 | 15 | 20 | 620 | 390 | 32 | 7.2 | 2.0 | 3.7 | 1.9 |
| 7 | 20 | 70 | 500 | 400 | 32 | 6.5 | 2.5 | 3.9 | [illegible] |
| 8 | 70 | 120 | 410 | 418 | 12 | 8.6 | 2.0 | 4.0 | [illegible] |
| 9 | 120 | 120 | 380 | 400 | 11 | 9.0 | 1.7 | 3.9 | [illegible] |
| 10 | 160 | 130 | 360 | 390 | 10 | 8.0 | 1.5 | 3.7 | [illegible] |
| 11 | 100 | 130 | 340 | 380 | 10 | 7.4 | 2.0 | 3.5 | [illegible] |
| 12 | 60 | 140 | 330 | 360 | 9 | 6.8 | 2.0 | 3.5 | [illegible] |
| 13 | 60 | 150 | 320 | 350 | 8 | 6.5 | 2.0 | 3.3 | 1.4 |
| 14 | 80 | 180 | 320 | 340 | 7 | 6.6 | 2.0 | 3.1 | [illegible] |
| 15 | 100 | 220 | 310 | 330 | 6 | 9.0 | 1.5 | 3.0 | [illegible] |
| 16 | 190 | 270 | 310 | 300 | 5.6 | 9.6 | 1.5 | 3.0 | [illegible] |
| 17 | 400 | 320 | 300 | 280 | 8.4 | 9.9 | 1.5 | 3.0 | [illegible] |
| 18 | 500 | 370 | 300 | 250 | 10.5 | 12 | 1.5 | 3.0 | [illegible] |
| 19 | 510 | 390 | 300 | 220 | 10.5 | 17 | 1.5 | 3.0 | [illegible] |
| 20 | 570 | 390 | 300 | 190 | 10.5 | 26 | 1.5 | 3.0 | [illegible] |
| 21 | 500 | 380 | 300 | 160 | 7.6 | 18 | 1.5 | 3.0 | 1.1 |
| 22 | 460 | 370 | 300 | 134 | 9.0 | 12 | 1.5 | 3.0 | 1.1 |
| 23 | 450 | 380 | 300 | 126 | 10.5 | 6.5 | 1.5 | 3.0 | [illegible] |
| 24 | 450 | 400 | 300 | 118 | 9.9 | 6.5 | 1.5 | 3.0 | 1.0 |
| 25 | 440 | 420 | 300 | 110 | 10.5 | 5.6 | 1.5 | 3.0 | 1.0 |
| 26 | 400 | 460 | 302 | 102 | 10.5 | 5.3 | 1.5 | 3.0 | 1.0 |
| 27 | 200 | 490 | 310 | 94 | 11.1 | 3.9 | 1.5 | 3.0 | [illegible] |
| 28 | 120 | 530 | 320 | 86 | 10.5 | 4.0 | 1.5 | 3.0 | [illegible] |
| 29 | 110 | ........ | 320 | 78 | 18 | 4.3 | 3.0 | 3.0 | [illegible] |
| 30 | 110 | ........ | 320 | 62 | 12 | 4.4 | 3.0 | 2.9 | [illegible] |
| 31 | 110 | ........ | 330 | ........ | 11.4 | ........ | 3.0 | 2.7 | ........ |

*Daily discharge, in second-feet, of Miller Creek near Lorella, Oreg., for 1909–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10. | | | | | | | | | | | | |
| 1 | 1.3 | 6 | 34 | 2 | 111 | 2,620 | 148 | 6 | 8 | 3 | 2 | 2 |
| 2 | 1.4 | 6 | 34 | 3 | 84 | 1,410 | 122 | 9 | 8 | 3 | 2 | 2 |
| 3 | 1.5 | 6 | 34 | 3 | 61 | 1,120 | 109 | 14 | 8 | 3 | 2 | 2 |
| 4 | 1.5 | 12 | 34 | 2 | 26 | 1,330 | 98 | 18 | 5 | 3 | 2 | 2 |
| 5 | 1.5 | 12 | 34 | 3 | 14 | 1,190 | 83 | 16 | 5 | 3 | 2 | 2 |
| 6 | 1.6 | 12 | 34 | 5 | 18 | 940 | 71 | 12 | 5 | 3 | 2 | 2 |
| 7 | 1.7 | 12 | 34 | 4 | 18 | 770 | 58 | 9 | 4 | 3 | 2 | 2 |
| 8 | 1.8 | 12 | 34 | 4 | 18 | 745 | 49 | 7 | 4 | 3 | 2 | 2 |
| 9 | 1.9 | 12 | 34 | 2 | 18 | 770 | 43 | 5 | 4 | 3 | 2 | 2 |
| 10 | 2.0 | 12 | 34 | 2 | 18 | 770 | 38 | 3 | 3 | 3 | 2 | 2 |
| 11 | 1.9 | 12 | 34 | 2 | 22 | 795 | 38 | 2 | 3 | 3 | 2 | 2 |
| 12 | 1.8 | 12 | 34 | 2 | 25 | 820 | 43 | 2 | 3 | 2 | 3 | 2 |
| 13 | 1.8 | 12 | 32 | 2 | 78 | 770 | 30 | 1 | 3 | 2 | 3 | 2 |
| 14 | 1.7 | 12 | 32 | 2 | 46 | 770 | 20 | 0 | 3 | 2 | 3 | 3 |
| 15 | 1.7 | 12 | 30 | 2 | 42 | 720 | 15 | 0 | 3 | 2 | 3 | 3 |
| 16 | 1.6 | 12 | 28 | 2 | 28 | 620 | 12 | 0 | 4 | 2 | 3 | 3 |
| 17 | 1.5 | 12 | 28 | 2 | 25 | 670 | 9 | 0 | 5 | 2 | 3 | 3 |
| 18 | 1.6 | 12 | 26 | 2 | 14 | 720 | 7 | 1 | 5 | 2 | 3 | 3 |
| 19 | 1.9 | 54 | 24 | 2 | 11 | 810 | 5 | 7 | 5 | 2 | 3 | 3 |
| 20 | 2.2 | 206 | 22 | 2 | 11 | 516 | 4 | 8 | 4 | 2 | 3 | 4 |
| 21 | 2.3 | 1,180 | 19 | 26 | 11 | 380 | 3 | 9 | 4 | 2 | 3 | 4 |
| 22 | 2.6 | 1,600 | 16 | 770 | 11 | 447 | 3 | 9 | 4 | 2 | 3 | 4 |
| 23 | 2.9 | 1,570 | 13 | 820 | 11 | 464 | 3 | 8 | 4 | 2 | 3 | 3 |
| 24 | 3.0 | 900 | 11 | 238 | 26 | 334 | 2 | 7 | 4 | 2 | 2 | 3 |
| 25 | 3.0 | 622 | 9 | 152 | 192 | 306 | 2 | 7 | 3 | 2 | 2 | 3 |
| 26 | 4.0 | 330 | 7 | 90 | 134 | 239 | 1 | 8 | 3 | 2 | 2 | 3 |
| 27 | 4.0 | 168 | 7 | 134 | 172 | 231 | 1 | 8 | 3 | 2 | 2 | 3 |
| 28 | 5.0 | 134 | 7 | 134 | 1,060 | 184 | 1 | 7 | 2 | 2 | 2 | 3 |
| 29 | 5.0 | 66 | 7 | 172 | ....... | 144 | 1 | 7 | 2 | 2 | 2 | 3 |
| 30 | 6.0 | 34 | 7 | 152 | ....... | 133 | 3 | 6 | 2 | 2 | 2 | 3 |
| 31 | 6.0 | ....... | 7 | 134 | ....... | 131 | ....... | 7 | ....... | 2 | 2 | ....... |
| 1910–11. | | | | | | | | | | | | |
| 1 | 3 | 5 | 160 | 5.7 | 0.1 | 1.7 | 1,900 | 106 | 12 | 5.7 | 0.6 | 0.4 |
| 2 | 3 | 5 | 447 | 5.5 | .1 | 1.8 | 1,480 | 95 | 10 | 5.4 | .6 | .7 |
| 3 | 3 | 5 | 940 | 5.5 | .1 | 1.9 | 879 | 92 | 10 | 4.8 | .6 | .7 |
| 4 | 5 | 5 | 508 | 5.5 | .2 | 2.0 | 938 | 85 | 9.9 | 4.3 | .7 | .7 |
| 5 | 5 | 5 | 306 | 5.0 | .2 | 4.8 | 1,640 | 92 | 9.1 | 3.9 | .7 | 1.1 |
| 6 | 5 | 5 | 202 | 4.0 | .2 | 23 | 1,060 | 112 | 9.6 | 3.4 | .7 | 1.4 |
| 7 | 4 | 5 | 122 | 3.3 | .2 | 13 | 823 | 99 | 13 | 3.2 | .7 | 1.4 |
| 8 | 4 | 8 | 720 | 2.5 | .2 | 17 | 626 | 87 | 14 | 2.5 | .7 | 1.3 |
| 9 | 3 | 7 | 820 | 2.2 | .2 | 23 | 582 | 80 | 14 | 1.9 | .7 | 1.5 |
| 10 | 3 | 6 | 1,370 | 1.7 | .2 | 39 | 362 | 68 | 11 | 1.5 | .7 | 1.4 |
| 11 | 3 | 7 | 413 | 1.5 | .2 | 34 | 393 | 56 | 8.7 | 1.5 | 1.1 | 1.3 |
| 12 | 5 | 7 | 160 | 1.4 | .2 | 34 | 370 | 44 | 5.7 | 1.5 | 1.5 | 1.3 |
| 13 | 5 | 7 | 122 | 1.2 | .2 | 39 | 345 | 35 | 4.3 | 1.5 | 1.8 | 1.3 |
| 14 | 5 | 7 | 109 | 1.1 | .2 | 50 | 320 | 29 | 6.9 | 1.4 | 1.7 | 1.3 |
| 15 | 5 | 6 | 98 | .4 | .2 | 56 | 296 | 25 | 4.8 | 1.5 | 1.3 | 1.3 |
| 16 | 5 | 6 | 68 | .2 | .2 | 86 | 426 | 23 | 4.8 | 1.5 | .9 | 1.5 |
| 17 | 5 | 6 | 53 | .2 | .2 | 127 | 426 | 30 | 7.1 | 1.4 | .7 | 1.7 |
| 18 | 5 | 7 | 36 | .2 | .2 | 144 | 356 | 73 | 4.3 | 1.5 | .7 | 2.2 |
| 19 | 5 | 7 | 38 | .2 | .2 | 126 | 268 | 81 | 3.4 | 1.5 | .7 | 2.5 |
| 20 | 5 | 10 | 38 | .2 | .3 | 231 | 275 | 68 | 2.9 | 1.3 | .7 | 2.5 |
| 21 | 5 | 10 | 38 | .2 | .5 | 393 | 293 | 50 | 2.6 | 1.3 | .7 | 2.6 |
| 22 | 5 | 12 | 38 | .2 | .6 | 823 | 290 | 34 | 2.9 | .7 | .7 | 2.7 |
| 23 | 5 | 76 | 38 | .2 | .9 | 1,440 | 275 | 23 | 5.4 | .7 | .7 | 2.6 |
| 24 | 5 | 160 | 38 | .2 | 1.0 | 1,640 | 231 | 13 | 5.5 | .7 | .7 | 2.6 |
| 25 | 5 | 191 | 10 | .2 | 1.2 | 1,560 | 207 | 12 | 5.2 | .7 | .7 | 2.3 |
| 26 | 5 | 160 | 10 | .2 | 1.3 | 1,300 | 182 | 12 | 5.4 | .8 | .7 | 4.2 |
| 27 | 5 | 160 | 10 | .2 | 1.5 | 1,560 | 180 | 13 | 5.5 | .7 | .6 | 4.2 |
| 28 | 5 | 106 | 10 | .2 | 1.6 | 1,720 | 182 | 10 | 5.2 | .7 | .6 | 4.0 |
| 29 | 5 | 136 | 9 | .2 | ....... | 1,770 | 146 | 9.1 | 4.8 | .6 | .6 | 4.0 |
| 30 | 5 | 122 | 9 | .2 | ....... | 1,900 | 120 | 9.4 | 4.8 | .6 | .5 | 4.0 |
| 31 | 5 | ....... | 5 | .1 | ....... | 2,070 | ....... | 7.9 | ....... | .6 | .4 | ....... |

*Daily discharge, in second-feet, of Miller Creek near Lorella, Oreg., for 1909–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | | | |
| 1 | 4.0 | 7.7 | 7.7 | 18 | [illegible] | 30 | 98 | [illegible] | [illegible] |
| 2 | 4.0 | 7.7 | 7.7 | 19 | 50 | 39 | [illegible] | 770 | [illegible] |
| 3 | 4.2 | 7.7 | 7.7 | 19 | 60 | 50 | [illegible] | [illegible] | [illegible] |
| 4 | 4.4 | 7.7 | 7.7 | 15 | [illegible] | 74 | 96 | 418 | [illegible] |
| 5 | 4.8 | 7.9 | 7.7 | 13 | 144 | 74 | 98 | 288 | [illegible] |
| 6 | 5.0 | 8.2 | 7.9 | 13 | 127 | 74 | [illegible] | 288 | [illegible] |
| 7 | 5.4 | 8.4 | 8.2 | 13 | 127 | 74 | [illegible] | 287 | [illegible] |
| 8 | 5.2 | 9.1 | 8.2 | 13 | 320 | 74 | 105 | 143 | [illegible] |
| 9 | 5.4 | 12 | 10 | 13 | 382 | 69 | 108 | 109 | [illegible] |
| 10 | 5.4 | 12 | 10 | 13 | [illegible] | 67 | 112 | 94 | [illegible] |
| 11 | 5.5 | 13 | 10 | 13 | [illegible] | 52 | 178 | 70 | [illegible] |
| 12 | 5.6 | 13 | 10 | 20 | 148 | 47 | 163 | 62 | [illegible] |
| 13 | 5.6 | 13 | 10 | 52 | 160 | 68 | 138 | 59 | [illegible] |
| 14 | 5.7 | 12 | 10 | 68 | 119 | 50 | 128 | 40 | [illegible] |
| 15 | 6.0 | 12 | 10 | 61 | 333 | 37 | 142 | 25 | [illegible] |
| 16 | 6.3 | 17 | 11 | 44 | 2,070 | 48 | 90 | 18 | [illegible] |
| 17 | 6.6 | 19 | 11 | 37 | 2,520 | 56 | 91 | 16 | [illegible] |
| 18 | 6.9 | 16 | 11 | 28 | 720 | 90 | 111 | 13 | [illegible] |
| 19 | 7.2 | 13 | 11 | 28 | 287 | 107 | 90 | 12 | [illegible] |
| 20 | 7.5 | 11 | 11 | 28 | 52 | 98 | 90 | 11 | [illegible] |
| 21 | 7.7 | 10 | 11 | 28 | 50 | 68 | 68 | 15 | [illegible] |
| 22 | 7.7 | 9.6 | 15 | 48 | 50 | 68 | 74 | 29 | [illegible] |
| 23 | 7.7 | 9.6 | 30 | 50 | 50 | 98 | 90 | 40 | [illegible] |
| 24 | 7.7 | 9.6 | 30 | 180 | 29 | 112 | 96 | 40 | [illegible] |
| 25 | 7.7 | 7.7 | 30 | 1,080 | 29 | 112 | 90 | 50 | [illegible] |
| 26 | 7.7 | 7.7 | 30 | 770 | 29 | 109 | 112 | 55 | 4.9 |
| 27 | 7.7 | 7.7 | 30 | 255 | 18 | 107 | 130 | 55 | 9.9 |
| 28 | 7.7 | 7.7 | 30 | 184 | 20 | 107 | 102 | 40 | 10.4 |
| 29 | 7.7 | 7.7 | 34 | 127 | 23 | 107 | 202 | 41 | 12.4 |
| 30 | 7.7 | 7.7 | 23 | 92 | ........ | 109 | 582 | 28 | 13 |
| 31 | 7.7 | ...... | 23 | 90 | ........ | 98 | ........ | 17 | ...... |

NOTE.—Discharge determined from fairly well defined rating curves applicable as follows: Jan. 1 to Dec. 31, 1909; Jan. 1 to Feb. 28, 1910; Mar. 1 to Dec. 31, 1910; Jan. 1, 1911, to June 30, 1912. On days when gage was not read the discharge was interpolated or estimated from hydrographs of neighboring streams. Discharge below 10 second-feet are only approximate.

*Monthly discharge of Miller Creek near Lorella, Oreg., for 1904–1911.*

[Drainage area, 270 square miles.]

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1904.** | | | | | | | |
| August | 1.5 | .75 | 1.3 | ........ | ........ | 79 | |
| September | 1.5 | .0 | .2 | ........ | ........ | 12 | |
| **1904–5.** | | | | | | | |
| October | 8 | 1.5 | 2.4 | ........ | ........ | 148 | |
| November | 8 | 1.5 | 3.7 | ........ | ........ | 221 | |
| December | 10.5 | 1.5 | 6.2 | ........ | ........ | 381 | |
| January | 613 | 8 | 179 | ........ | ........ | 11,010 | |
| February | 561 | 13 | 138 | ........ | ........ | 7,664 | |
| March | 411 | 82 | 153 | ........ | ........ | 9,408 | |
| April | 400 | 4 | 71.0 | ........ | ........ | 4,225 | |
| May | 13 | 0 | 6.5 | ........ | ........ | 400 | |
| June | 8 | 0 | 3.0 | ........ | ........ | 179 | |
| July | 0 | 0 | .0 | ........ | ........ | 0 | |
| August | 0 | 0 | .0 | ........ | ........ | 0 | |
| September | 0 | 0 | .0 | ........ | ........ | 0 | |
| The year | 613 | 0 | 46.9 | ........ | ........ | 33,636 | |

*Monthly discharge of Miller Creek near Lorella, Oreg., for 1904–1911*—Continued.

| Month. | Discharge in second-feet. | | | | Run-off. | | Accuracy. |
|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | Per square mile. | Depth in inches on drainage area. | Total in acre-feet. | |
| **1905–6.** | | | | | | | |
| October | 0 | 0 | 0 | | | 0 | |
| November | 0 | 0 | 0 | | | 0 | |
| December | 0 | 0 | 0 | | | 0 | |
| January | 13 | 4 | 7.7 | | | 474 | B. |
| February | 52 | 4 | 11.5 | | | 639 | B. |
| March | 1,660 | 39 | 445 | | | 27,400 | A. |
| April | 2,360 | 136 | 779 | | | 46,400 | A. |
| May | 245 | 13 | 56.7 | | | 3,490 | A. |
| June | 168 | 1.5 | 47.3 | | | 2,810 | B. |
| July | 2.8 | 0 | .3 | | | 18 | C. |
| August | 0 | 0 | 0 | | | 0 | |
| September | 0 | 0 | 0 | | | 0 | |
| The year | 2,360 | 0 | 112 | | | 81,200 | |
| **1906–7.** | | | | | | | |
| October | 0 | 0 | 0 | | | 0 | |
| November | 1.5 | 0 | .6 | | | 36 | C. |
| December | 685 | 1.5 | 68.1 | | | 4,190 | A. |
| January | 464 | 1.7 | 24.3 | | | 1,490 | B. |
| February | 6,730 | 138 | 1,020 | | | 56,600 | A. |
| March | 2,060 | 138 | 543 | | | 33,400 | A. |
| April | 1,500 | 59 | 448 | | | 26,700 | B. |
| May | 60 | 9.5 | 39.0 | | | 2,400 | A. |
| June | 90 | 1.5 | 26.6 | | | 1,580 | B. |
| July | 1.3 | 0 | .17 | | | 10.4 | C. |
| August | 0 | 0 | 0 | | | 0 | |
| September | 0 | 0 | 0 | | | 0 | |
| The year | 6,730 | 0 | 181 | | | 126,000 | |
| **1907–8.** | | | | | | | |
| October | 5 | 0 | .80 | | | 49.2 | C. |
| November | 5 | 1.7 | 3.02 | | | 180 | C. |
| December | 490 | 1.7 | 71.9 | | | 4,420 | B. |
| January | 206 | 16.6 | 95.4 | | | 5,870 | B. |
| February | 25 | .3 | 10.1 | | | 581 | C. |
| March | 290 | 28 | 123 | | | 7,560 | B. |
| April | 46 | 1.7 | 17.5 | | | 1,040 | B. |
| May | 35 | 0 | 13.9 | | | 855 | B. |
| June | 7 | 0 | .39 | | | 23 | C. |
| July | 0 | 0 | 0 | | | 0 | |
| August | 0 | 0 | 0 | | | 0 | |
| September | 0 | 0 | 0 | | | 0 | |
| The year | 490 | 0 | 28.0 | | | 20,600 | |
| **1908–9.** | | | | | | | |
| October | 0 | 0 | 0 | | | 0 | |
| November | | 0 | .48 | | | 29 | D. |
| December | | | .56 | | | 34 | D. |
| January | | | 204 | 0.756 | 0.87 | 12,500 | D. |
| February | | | 242 | .896 | .93 | 13,400 | D. |
| March | | | 387 | 1.43 | 1.65 | 23,800 | C. |
| April | | | 254 | .941 | 1.05 | 15,100 | C. |
| May | 49 | 5.6 | 16.1 | .060 | .07 | 990 | B. |
| June | 26 | 3.9 | 9.56 | .035 | .04 | 569 | B. |
| July | | | 2.16 | .0080 | .01 | 133 | C. |
| August | | | 3.21 | .012 | .01 | 197 | C. |
| September | | | 1.47 | .0054 | .006 | 87 | C. |
| The year | | | 93.4 | | | 66,800 | |
| **1909–10.** | | | | | | | |
| October | | | 2.51 | .0093 | .01 | 154 | C. |
| November | | | 235 | .870 | .97 | 14,000 | C. |
| December | | | 23.9 | .088 | .10 | 1,470 | C. |
| January | 820 | 2 | 92.6 | .343 | .40 | 5,690 | C. |
| February | 1,060 | 11 | 82.3 | .305 | .32 | 4,570 | B. |
| March | 2,620 | 131 | 705 | 2.61 | 3.01 | 43,300 | A. |
| April | 148 | 1 | 34.1 | .126 | .14 | 2,030 | B. |
| May | 18 | 0 | 6.5 | .024 | .03 | 400 | C. |
| June | 8 | 2 | 4.1 | .015 | .02 | 244 | C. |
| July | 3 | 2 | 2.4 | .0089 | .01 | 148 | C. |
| August | 3 | 2 | 2.4 | .0089 | .01 | 148 | C. |
| September | 4 | 2 | 2.7 | .010 | .01 | 161 | C. |
| The year | 2,620 | 0 | 99.5 | .368 | 5.03 | 72,300 | |

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|---|---|---|---|---|
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| | | | |
|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Shasta River at Montague, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | ........ | 2.65 | 2.85 | 3.0 | 2.95 | 3.1 | 3.0 | 2.8 | 4.0 | 3.35 |
| 2 | ........ | 2.7 | 2.85 | 3.0 | 2.9 | 3.1 | 2.95 | 2.8 | 3.6 | 3.3 |
| 3 | 2.75 | 2.7 | 2.9 | 3.0 | 2.9 | 3.1 | 2.95 | 2.8 | 3.6 | 3.3 |
| 4 | 2.75 | 2.7 | 2.9 | 3.0 | 2.9 | 3.1 | 2.95 | 2.8 | 3.4 | 3.3 |
| 5 | 2.8 | 2.7 | 2.9 | 3.0 | 2.9 | 3.05 | 3.0 | 2.8 | 3.4 | 3.3 |
| 6 | 2.8 | 2.7 | 2.9 | 3.0 | 2.9 | 3.05 | 3.3 | 2.8 | ........ | 3.0 |
| 7 | 2.75 | 2.7 | 2.9 | 3.0 | 2.9 | 3.05 | 3.3 | 2.8 | ........ | 3.0 |
| 8 | 2.75 | 2.7 | 2.9 | 3.0 | 3.0 | 3.05 | 3.3 | 2.8 | ........ | 3.0 |
| 9 | 2.75 | 2.8 | 2.9 | 3.0 | 3.15 | 3.1 | 3.1 | 2.8 | ........ | 3.4 |
| 10 | 2.8 | 2.85 | 2.9 | 3.0 | 3.15 | 3.1 | 3.05 | 2.8 | ........ | 3.2 |
| 11 | 2.8 | 2.8 | 2.95 | 3.0 | 3.15 | 3.1 | 3.1 | 2.8 | ........ | 3.2 |
| 12 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.1 | 3.05 | 2.8 | 3.2 | 3.2 |
| 13 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.05 | 3.1 | 2.85 | 3.1 | 3.2 |
| 14 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.05 | 3.1 | 2.85 | 3.1 | 3.2 |
| 15 | 2.75 | 2.8 | 2.95 | 3.0 | 3.15 | 3.05 | 3.1 | 2.9 | 3.1 | 3.2 |
| 16 | 2.75 | 2.8 | 2.95 | 3.0 | 3.1 | 3.3 | 3.1 | 2.9 | 3.1 | 3.0 |
| 17 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.7 | 3.1 | 2.8 | 3.0 | 3.0 |
| 18 | 2.8 | 2.8 | 3.0 | 3.0 | 3.1 | 4.0 | 3.1 | 2.8 | 3.1 | 3.0 |
| 19 | 2.8 | 2.8 | 2.95 | 3.0 | 3.1 | 3.6 | 3.1 | 2.8 | 3.2 | 2.8 |
| 20 | 2.8 | 2.8 | 3.0 | 3.0 | 3.1 | 3.2 | 3.05 | 2.8 | 3.3 | 2.8 |
| 21 | 2.8 | 2.8 | 2.95 | 2.95 | 3.0 | 3.2 | 3.05 | 2.8 | 3.5 | 3.0 |
| 22 | 2.8 | 2.8 | 2.95 | 3.0 | 3.0 | 3.1 | 3.0 | 2.8 | 3.6 | 3.2 |
| 23 | 2.8 | 2.8 | 3.0 | 3.0 | 3.0 | 3.1 | 3.05 | 2.8 | 3.5 | 3.5 |
| 24 | 2.7 | 2.8 | 3.0 | 3.0 | 3.0 | 3.05 | 3.0 | 2.9 | 3.4 | 3.8 |
| 25 | 2.7 | 2.8 | 3.0 | 3.0 | ........ | 3.0 | 3.0 | 2.9 | 3.35 | 3.6 |
| 26 | 2.75 | 2.85 | 3.0 | 3.0 | ........ | 3.0 | 3.0 | 2.9 | 3.3 | 3.2 |
| 27 | 2.75 | 2.85 | 3.0 | 3.0 | ........ | 3.0 | 2.9 | 2.8 | 3.3 | 3.35 |
| 28 | 2.6 | 2.85 | 3.0 | 3.0 | 3.3 | 3.0 | 2.9 | 2.9 | 3.35 | 3.0 |
| 29 | 2.6 | 2.85 | 3.0 | 2.95 | 3.3 | 3.0 | 2.9 | 3.4 | 3.35 | 3.0 |
| 30 | 2.6 | 2.85 | 3.0 | 2.95 | 3.2 | ........ | 2.85 | 3.7 | 3.35 | 3.1 |
| 31 | ........ | 2.85 | ........ | 2.95 | 3.2 | ........ | 2.8 | ........ | 3.35 | ........ |

NOTE.—Jan. 25, maximum recorded gage height 23.0 feet at 9 a. m.

## EAST FORK OF SCOTT RIVER NEAR CALLAHAN, CAL.

Scott River rises in the Scott Mountains in the southern part of Siskiyou County, and flows northwestward to its junction with Klamath River near Hamburg Bar. The length of the main river from the junction of the South and East forks near Callahan is about 50 miles. The basin is narrow and the tributaries are small. Scott Valley, extending from Fort Jones to French Gulch, is a rich agricultural valley. Below this valley the river enters a canyon in which it continues to its mouth.

The gaging station, which is located 500 feet west of W. Schneider's ranch house, 6 miles east of Callahan, in sec. 18., T. 40 N., R. 7 W., in the Shasta National Forest, was established November 1, 1910.

The gage is a vertical staff fastened to a willow tree on the left bank.

Discharge measurements are made from the foot log 30 feet below the gage.

This station is maintained in cooperation with the United States Forest Service.

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|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
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| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of East Fork of Scott River near Callahan, Cal., for 1910–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | | 2.0 | | 3.0 | | 2.9 | | | 3.8 |
| 2 | 2.8 | | | | | | | 5.0 | |
| 3 | | | 3.0 | | 3.05 | | | | |
| 4 | | | | | | 3.0 | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | 2.9 | 4.5 | |
| 7 | | | | | | 3.4 | | | |
| 8 | | | | | | | | | |
| 9 | | | | | 3.0 | | | | |
| 10 | | | | | | 3.2 | 2.8 | | |
| 11 | | | | | | | | | 3.6 |
| 12 | | | | 3.1 | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | 2.8 | | | | 3.0 | | 3.0 | 4.4 | |
| 16 | | 2.9 | | | | 3.2 | | | |
| 17 | | | | | | | | | 3.5 |
| 18 | | | 3.0 | | | | | | |
| 19 | | | | | 3.0 | 3.2 | | | |
| 20 | | | | | | | 3.3 | 4.4 | |
| 21 | | | | 3.0 | | | | | |
| 22 | | | | | | | | | 3.4 |
| 23 | | | | | | | | | 3.9 |
| 24 | | | | 3.3 | | | 3.9 | | 3.7 |
| 25 | | | | 4.0 | 2.9 | | | | 3.6 |
| 26 | | | | 3.7 | | 3.5 | | | |
| 27 | | | | 3.4 | | | | 4.0 | |
| 28 | | | | 3.1 | | | 4.5 | | 3.4 |
| 29 | | | | | | | | | |
| 30 | | 2.9 | | | | 3.3 | | | |
| 31 | 2.0 | | 3.0 | | | | | | |

*Daily discharge, in second-feet, of East Fork of Scott River near Callahan, Cal., for 1910–1912.*

| Day. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11. | | | | | | | | | | |
| 1 | 6 | 18 | 16 | 71 | 23 | 265 | 88 | 160 | 16 | |
| 2 | 7 | 23 | 16 | 71 | 23 | 245 | 88 | 170 | 16 | |
| 3 | 7 | 32 | 16 | 71 | 23 | 225 | 88 | 175 | 15 | |
| 4 | 7 | 43 | 16 | 71 | 32 | 205 | 88 | 180 | 14 | |
| 5 | 7 | 32 | 16 | 71 | 56 | 185 | 88 | 175 | 14 | |
| 6 | 7 | 23 | 16 | 32 | 382 | 165 | 88 | 170 | 13 | |
| 7 | 7 | 20 | 16 | 32 | 205 | 145 | 108 | 170 | 13 | |
| 8 | 7 | 23 | 16 | 32 | 130 | 125 | 108 | 165 | 12 | |
| 9 | 7 | 43 | 11 | 32 | 98 | 105 | 108 | 160 | 11 | |
| 10 | 7 | 56 | 11 | 43 | 88 | 88 | 108 | 155 | 11 | |
| 11 | 11 | 71 | 11 | 43 | 88 | 73 | 112 | 147 | 11 | |
| 12 | 11 | 90 | 11 | 33 | 88 | 58 | 115 | 140 | 10 | |
| 13 | 11 | 70 | 11 | 33 | 88 | 43 | 119 | 132 | 10 | |
| 14 | 11 | 40 | 11 | 33 | 88 | 40 | 123 | 124 | 9 | |
| 15 | 11 | 30 | 11 | 33 | 88 | 40 | 126 | 116 | 8 | |
| 16 | 11 | 30 | 11 | 33 | 88 | 40 | 130 | 108 | 8 | |
| 17 | 14 | 30 | 11 | 33 | 98 | 45 | 130 | 99 | 7 | |
| 18 | 16 | 20 | 14 | 33 | 108 | 50 | 130 | 89 | 7 | |
| 19 | 16 | 20 | 71 | 33 | 130 | 55 | 130 | 80 | 6 | |
| 20 | 16 | 20 | 56 | 33 | 130 | 60 | 130 | 71 | 6 | 2 |
| 21 | 16 | 20 | 43 | 33 | 135 | 71 | 135 | 66 | 5 | |
| 22 | 16 | 20 | 32 | 33 | 140 | 78 | 140 | 61 | 4 | |
| 23 | 16 | 15 | 32 | 33 | 150 | 86 | 140 | 56 | 3 | |
| 24 | 38 | 15 | 32 | 33 | 155 | 93 | 145 | 50 | 3 | |
| 25 | 23 | 15 | 32 | 33 | 160 | 101 | 145 | 44 | 3 | |
| 26 | 20 | 15 | 32 | 33 | 170 | 108 | 150 | 38 | 2 | |
| 27 | 20 | 15 | 38 | 33 | 175 | 103 | 155 | 32 | | |
| 28 | 18 | 15 | 32 | 23 | 180 | 98 | 140 | 28 | | |
| 29 | 16 | 15 | 43 | | 200 | 93 | 124 | 24 | | |
| 30 | 16 | 15 | 130 | | 220 | 88 | 108 | 20 | | |
| 31 | | 16 | 108 | | 240 | | 55 | | | |

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### SCOTT RIVER NEAR SCOTT BAR, CAL.

This station, which is located at a highway bridge about 2½ miles west of Scott Bar, in the NW. ¼ sec. 6, T. 45 N., R. 10 W., and about half a mile above the junction with Klamath River, was established September 12, 1911.

The gage is a vertical staff fastened to left abutment of bridge near upstream end. Discharge measurements are made from the bridge or by wading.

The channel is composed of bowlders and gravel.

There is some water diverted above the station for irrigation and mining.

*Discharge measurements of Scott River near Scott Bar, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 13 | G. T. Peekema | 1.48 | 85 | May 24 | Lesley Lee | 3.53 | 1,470 |
| 1912. | | | | 27 | do | 4.09 | 2,210 |
| Jan. 19 | H. J. Tompkins | 2.41 | 439 | | | | |

*Daily gage height, in feet, of Scott River near Scott Bar, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 1.5 | 1.6 | 1.7 | 1.7 | 2.4 | 2.6 | 2.6 | 3.6 | 4.1 |
| 2 | | 1.5 | 1.6 | 1.7 | 1.7 | 2.3 | 2.6 | 2.6 | 3.6 | 4.2 |
| 3 | | 1.5 | 1.6 | 1.7 | 1.7 | 2.2 | 2.6 | 2.6 | 3.5 | 4.2 |
| 4 | | 1.5 | 1.6 | 1.7 | 1.7 | 2.2 | 2.5 | 2.6 | 3.3 | 4.4 |
| 5 | | 1.5 | 1.6 | 1.75 | 1.7 | 2.5 | 2.5 | 2.6 | 3.3 | 4.5 |
| 6 | | 1.5 | 1.6 | 1.75 | 1.7 | 2.6 | 2.6 | 2.6 | 3.3 | 4.4 |
| 7 | | 1.5 | 1.6 | 1.75 | 1.8 | 2.5 | 2.65 | 2.6 | 3.5 | 4.4 |
| 8 | | 1.5 | 1.6 | 1.7 | 1.8 | 2.8 | 2.6 | 2.6 | 3.5 | 4.2 |
| 8 | | 1.5 | 1.6 | 1.7 | 2.0 | 3.0 | 2.5 | 2.6 | 3.9 | 4.1 |
| 10 | | 1.5 | 1.7 | 1.7 | 2.1 | 3.2 | 2.5 | 2.7 | 4.0 | 3.95 |
| 11 | | 1.5 | 1.7 | 1.7 | 2.0 | 3.2 | 2.5 | 2.8 | 4.0 | 3.8 |
| 12 | 1.5 | 1.5 | 1.7 | 1.7 | 2.7 | 3.0 | 2.5 | 2.8 | 4.0 | 4.0 |
| 13 | 1.5 | 1.5 | 1.7 | 1.7 | 3.4 | 2.8 | 2.5 | 2.7 | 4.0 | 3.9 |
| 14 | 1.5 | 1.7 | 1.7 | 1.7 | 3.4 | 2.7 | 2.4 | 2.7 | 4.1 | 3.7 |
| 15 | 1.5 | 1.6 | 2.3 | 1.7 | 3.1 | 2.75 | 2.6 | 2.7 | 4.1 | 3.55 |
| 16 | 1.5 | 1.6 | 1.9 | 1.7 | 2.8 | 3.3 | 2.6 | 2.6 | 4.2 | 3.4 |
| 17 | 1.5 | 1.6 | 1.9 | 1.75 | 2.6 | 5.3 | 2.6 | 2.6 | 4.1 | 3.4 |
| 18 | 1.5 | 1.6 | 1.9 | 1.75 | 2.5 | 5.4 | 2.7 | 2.6 | 4.0 | 3.4 |
| 19 | 1.5 | 1.6 | 1.8 | 1.7 | 2.4 | 4.5 | 2.6 | 2.6 | 4.0 | 3.4 |
| 20 | 1.5 | 1.6 | 1.8 | 1.7 | 2.4 | 4.0 | 2.6 | 2.55 | 4.1 | 3.45 |
| 21 | 1.5 | 1.6 | 1.8 | 1.7 | 2.35 | 3.8 | 2.5 | 2.5 | 4.1 | 3.45 |
| 22 | 1.5 | 1.55 | 1.8 | 1.7 | 2.3 | 3.4 | 2.5 | 2.5 | 3.8 | 4.0 |
| 23 | 1.5 | 1.55 | 1.8 | 1.7 | 2.3 | 3.2 | 2.5 | 2.5 | 3.6 | 3.6 |
| 24 | 1.4 | 1.55 | 1.8 | 1.7 | 2.3 | 3.1 | 2.5 | 2.5 | 3.4 | 3.5 |
| 25 | 1.4 | 1.55 | 1.8 | 1.7 | 4.1 | 3.0 | 2.5 | 2.5 | 3.4 | 3.4 |
| 26 | 1.4 | 1.7 | 1.8 | 1.7 | 4.5 | 2.8 | 2.5 | 2.5 | 4.0 | 3.3 |
| 27 | 1.5 | 1.7 | 1.7 | 1.7 | 3.6 | 2.8 | 2.5 | 2.4 | 4.2 | 3.3 |
| 28 | 1.5 | 1.7 | 1.7 | 1.7 | 3.4 | 2.7 | 2.5 | 2.4 | 4.0 | 3.3 |
| 29 | 1.5 | 1.6 | 1.7 | 1.7 | 2.8 | 2.7 | 2.55 | 2.7 | 4.2 | 3.25 |
| 30 | 1.5 | 1.6 | 1.7 | 1.7 | 2.8 | | 2.6 | 3.0 | 4.4 | 3.2 |
| 31 | | 1.6 | | 1.7 | 2.5 | | 2.6 | | 4.2 | |

[illegible] bridge at Robert[illegible]
[illegible]
[illegible] The maximum is about [illegible]
[illegible] the crack in the
[illegible]

The gage is a vertical staff fastened to an alder tree on the left bank, about 700 feet above the bridge. Discharge measurements are made from the bridge or by wading.

The channel is composed of gravel and small bowlders.

The Reeve-Davis Consolidated Mining Co.'s ditch diverts water above the station and returns it below. Other small ditches also divert water for mining.

Discharge measurements and the gage height record are furnished by the United States Forest Service.

Estimates of discharge are withheld until additional data are available.

*Discharge measurements of Indian Creek River near Happy Camp, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 8 | G. T. Peekema........ | 2.58 | 39 | Jan. 16 | H. J. Tompkins........ | 4.55 | 888 |
| | | | | May 25 | Lasley Lee............. | 4.09 | 592 |

*Daily gage height, in feet, of Indian Creek near Happy Camp, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 2.55 | | 2.7 | | 4.3 | 4.0 | 3.8 | 5.2 | 4.15 |
| 2 | | 2.5 | | | 2.8 | 4.2 | 4.0 | 3.8 | 4.6 | 4.3 |
| 3 | | | | 2.6 | | 4.1 | 4.0 | 3.8 | 4.35 | 4.05 |
| 4 | | 2.6 | | | 2.7 | 4.35 | 3.8 | 3.8 | | 4.05 |
| 5 | | 2.6 | | | | 5.1 | 3.9 | 3.8 | 4.3 | 4.05 |
| 6 | | 2.6 | 2.5 | 3.6 | 2.8 | 4.7 | 3.9 | 3.8 | 4.5 | 4.05 |
| 7 | | 2.5 | | | 3.0 | 4.8 | 3.9 | 3.8 | 4.85 | 4.05 |
| 8 | 2.6 | 2.7 | | | 3.9 | 5.3 | 3.8 | 3.75 | 5.0 | |
| 9 | 2.6 | 2.6 | 2.95 | 2.9 | 3.7 | 5.5 | 3.8 | | 5.0 | 3.8 |
| 10 | 2.6 | 2.6 | 2.8 | | 4.2 | 5.6 | 3.9 | | 4.8 | 3.7 |
| 11 | 2.6 | | | 2.8 | 3.9 | 5.4 | 3.8 | 3.8 | | 3.6 |
| 12 | 2.7 | 2.6 | | 2.7 | 6.6 | 5.0 | 3.8 | 3.7 | 4.6 | |
| 13 | 2.6 | 2.65 | | 2.7 | 6.6 | 4.9 | 3.8 | 3.8 | | |
| 14 | 2.6 | 2.7 | 3.0 | 2.7 | 5.7 | 4.6 | 4.1 | 3.65 | 4.55 | |
| 15 | 2.6 | | 4.4 | 2.7 | 5.6 | 4.5 | 4.2 | 3.6 | 4.45 | |
| 16 | 2.6 | 2.6 | 3.6 | | 4.55 | 7.5 | 4.2 | | 4.35 | |
| 17 | 2.6 | 2.6 | 3.3 | 2.8 | 4.15 | 10.6 | 4.1 | | 4.35 | 3.5 |
| 18 | 2.6 | | | | 4.3 | 7.8 | 4.0 | | 4.35 | |
| 19 | 2.55 | 2.6 | | | 4.2 | 6.3 | 4.0 | | | 3.5 |
| 20 | | 2.55 | | 2.7 | 4.2 | 5.5 | 4.0 | | | 3.5 |
| 21 | 2.5 | 2.5 | | | 4.1 | 5.3 | 3.8 | | | 3.5 |
| 22 | 2.5 | | 3.0 | 2.7 | 4.0 | 5.2 | 3.8 | 3.55 | 4.1 | |
| 23 | 2.5 | 2.5 | | | 4.0 | 4.8 | 3.8 | | | 3.4 |
| 24 | 2.45 | | | 2.8 | 6.8 | 4.3 | 3.9 | | 4.1 | |
| 25 | 2.6 | 2.5 | | | 7.4 | 4.2 | 3.9 | 3.6 | 4.1 | 3.4 |
| 26 | 2.6 | | 3.0 | 2.7 | 6.0 | 4.2 | 3.9 | 3.6 | 4.1 | 3.4 |
| 27 | 2.6 | 2.55 | | | 5.2 | 4.2 | 3.8 | | | 3.35 |
| 28 | 2.6 | 2.55 | 3.0 | 2.8 | 4.8 | 4.1 | 3.9 | 3.8 | 4.15 | 3.3 |
| 29 | 2.6 | | | | 4.6 | 4.0 | 4.0 | 4.2 | 4.3 | 3.3 |
| 30 | 2.55 | 2.55 | 2.8 | 2.7 | 4.2 | | 4.0 | 4.6 | | |
| 31 | | | | | 4.3 | | | | 4.1 | |

## [illegible] DITCH NEAR HAPPY CAMP, CAL.

This station, which is located in a flume in the SE. ¼ sec. [illegible], T. 17 N., R. 7 E., about 5 miles north of Happy Camp, was established September [illegible], 1911.

The gage is a vertical staff fastened to the west side of the flume. Discharge measurements are made from a footbridge at the gage.

Discharge measurements and gage height record are furnished by the United States Forest Service.

Estimates of discharge are withheld until additional data are available.

*Discharge measurements of Keen-Dam Consolidated Mining Co.'s ditch near Happy Camp, Cal., in 191[illegible]–1[illegible].*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1911. | | Feet. | Sec.-ft. | 1912. | | Feet. | Sec.-ft. |
| Sept. [illegible] | [illegible] | [illegible] | [illegible] | Jan. 1[illegible] | [illegible] | [illegible] | [illegible] |
| | | | | Mar. 2[illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Keen-Dam Consolidated Mining Co.'s ditch near Happy Camp, Cal., for 191[illegible]–1[illegible].*

[illegible]

## [illegible] RIVER AT [illegible], CAL.

[illegible] below the bridge about 600 feet [illegible] in the SE. ¼ sec. 2, T. 13 N. [illegible] above the junction with Klamath River. [illegible]

[illegible] on the right bank. [illegible] discharge measurements [illegible]

[illegible] and boulders.

[illegible] additional data are [illegible]

*Discharge measurements of Salmon River at Somesbar, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 18 | G. T. Peekema | 3.55 | 193 | Feb. 13 | E. O. Christiansen | 5.82 | 2,460 |
| | | | | Feb. 14 | Christiansen and Hotelling | 5.72 | 1,940 |

*Daily gage height, in feet, of Salmon River at Somesbar, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | | |
| 1 | | 3.65 | 3.55 | 3.65 | 3.8 | 5.4 | 5.0 | 5.1 | 7.5 | 6.8 |
| 2 | | 3.6 | 3.55 | 3.65 | 3.8 | 5.2 | 4.95 | 5.1 | 6.9 | 7.0 |
| 3 | | 3.6 | 3.5 | 3.65 | 3.8 | 5.0 | 4.9 | 5.1 | 6.5 | 7.0 |
| 4 | | 3.7 | 3.5 | 3.65 | 3.8 | 5.0 | 4.9 | 5.1 | 6.3 | 7.0 |
| 5 | | 3.65 | 3.5 | 3.7 | 3.8 | 5.2 | 5.0 | 5.1 | 6.5 | 7.0 |
| 6 | | 3.5 | 3.5 | 4.0 | 3.9 | 5.4 | 5.05 | 5.1 | 6.6 | 7.0 |
| 7 | | 3.5 | 3.5 | 4.0 | 4.2 | 5.4 | 5.0 | 5.1 | 6.8 | 7.0 |
| 8 | | 3.5 | 3.55 | 3.9 | 4.9 | 5.9 | 4.9 | 5.15 | 7.0 | 7.0 |
| 9 | | 3.8 | 3.8 | 3.9 | 5.2 | 6.3 | 4.9 | 5.15 | 7.1 | 6.1 |
| 10 | | 3.8 | 4.0 | 3.8 | 5.4 | 6.6 | 4.9 | 5.45 | 7.1 | 6.1 |
| 11 | | 3.75 | 3.8 | 3.8 | 5.7 | 6.2 | 4.85 | 5.45 | 6.9 | 6.1 |
| 12 | | 3.7 | 3.8 | 3.75 | 6.3 | 6.0 | 4.8 | 5.2 | 6.9 | 6.0 |
| 13 | | 3.65 | 3.8 | 3.7 | 9.7 | 5.8 | 4.8 | 5.2 | 7.0 | 6.1 |
| 14 | | 3.85 | 3.9 | 3.7 | 8.9 | 5.7 | 4.8 | 4.9 | 6.9 | 5.9 |
| 15 | | 3.85 | 5.0 | 3.7 | 8.0 | 5.6 | 4.9 | 4.9 | 6.9 | 5.9 |
| 16 | | 3.75 | 4.7 | 3.8 | 7.6 | 7.9 | 5.1 | 4.9 | 6.8 | 5.7 |
| 17 | 3.6 | 3.7 | 4.2 | 3.8 | 7.0 | 13.4 | 5.1 | 4.9 | 6.7 | 5.6 |
| 18 | 3.55 | 3.65 | 3.9 | 3.8 | 6.6 | 10.8 | 5.1 | 5.0 | 6.6 | 5.4 |
| 19 | 3.55 | 3.65 | 3.9 | 3.85 | 6.1 | 8.0 | 5.1 | 5.0 | 6.7 | 5.6 |
| 20 | 3.5 | 3.6 | 3.9 | 3.8 | 5.6 | 7.2 | 5.1 | 4.95 | 6.7 | 5.4 |
| 21 | 3.5 | 3.6 | 3.9 | 3.9 | 5.1 | 6.8 | 5.1 | 4.9 | 6.8 | 5.25 |
| 22 | 3.5 | 3.6 | 3.85 | 3.9 | 5.0 | 6.2 | 5.1 | 4.9 | 6.0 | 5.2 |
| 23 | 3.5 | 3.55 | 3.6 | 3.9 | 5.0 | 6.1 | 5.1 | 4.9 | 6.0 | 5.1 |
| 24 | 3.5 | 3.55 | 3.8 | 3.9 | 5.6 | 5.8 | 5.2 | 4.85 | 6.2 | 5.1 |
| 25 | 3.5 | 3.55 | 3.7 | 3.9 | 9.1 | 5.6 | 5.3 | 4.85 | 6.5 | 5.1 |
| 26 | 3.55 | 3.55 | 3.7 | 3.9 | 8.4 | 5.5 | 5.3 | 4.85 | 6.5 | 5.15 |
| 27 | 3.65 | 3.6 | 3.7 | 4.0 | 8.1 | 5.3 | 5.3 | 4.85 | 6.3 | 5.1 |
| 28 | 3.6 | 3.6 | 3.7 | 4.2 | 7.9 | 5.3 | 5.2 | 4.85 | 6.4 | 5.1 |
| 29 | 3.6 | 3.6 | 3.7 | 4.2 | 7.1 | 5.1 | 5.2 | 5.65 | 6.7 | 5.0 |
| 30 | 3.6 | 3.6 | 3.65 | 4.0 | 6.6 | | 5.15 | 5.9 | 6.8 | 5.0 |
| 31 | | 3.6 | | 3.9 | 5.8 | | 5.2 | | 6.8 | |

NOTE.—Feb. 17, maximum recorded gage height 14.1 feet at 3.30 p. m.

## TRINITY RIVER NEAR TRINITY CENTER, CAL.

This station, which is located below the highway bridge 1½ miles southeast of Trinity Center, in the NE. ¼ sec. 16, T. 36 N., R. 7 W., in the Shasta National Forest, was established December 15, 1910.

Brush Creek enters about half a mile, Hatchet 1¾ miles, and Coffee Creek 6 miles above the station. Swift Creek enters 1½ miles below. The East Fork of Trinity River joins the main stream about three-fourths mile below the station.

The gage is a vertical staff on the right bank 650 feet below the bridge. August 20, 1911, a low-water section was installed 400 feet below the bridge, to read the same as the original gage.

Discharge measurements are made from the bridge above the gage.

[illegible]

[illegible]

[illegible]

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| | | | | | | |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Trinity River near Trinity Center, Cal., in 1910–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | | | | | | 3.4 | | | |
| 2 | 2.62 | | 2.61 | | | | | | |
| 3 | | | | 2.6 | 3.4 | | | | 6.1 |
| 4 | | 2.61 | | | | | | | |
| 5 | | | | | | | | | |
| 6 | 2.6 | | | | 3.5 | | | 5.05 | |
| 7 | | | | | | 3.8 | | 5.3 | |
| 8 | | | | | 3.7 | | | | |
| 9 | | | | 2.9 | | | | | |
| 10 | | | | | 4.1 | | | | |
| 11 | | | | 2.8 | 3.95 | | | | |
| 12 | | | | | | | | 5.7 | |
| 13 | | | | 3.4 | 3.8 | | | | |
| 14 | | | 2.68 | | | | | | 4.8 |
| 15 | | | | 3.2 | 3.65 | 3.7 | | 5.8 | |
| 16 | | | | | 3.8 | | | | |
| 17 | 2.6 | | | | 5.8 | | | | |
| 18 | | | | | 5.1 | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | 4.3 | | | | |
| 21 | | | | 3.2 | 4.05 | | | | |
| 22 | | | | | | | | 5.3 | |
| 23 | | | | | 3.85 | | | | |
| 24 | | 2.61 | | | | | | | 4.3 |
| 25 | | | 2.7 | 7.0 | | 4.0 | | | |
| 26 | | | 2.6 | | 3.6 | | | 7.1 | |
| 27 | 2.61 | | | | | | | | 4.2 |
| 28 | | | | | | | | | |
| 29 | | | 2.7 | | | | | | |
| 30 | | | | 3.7 | | | | | |
| 31 | | | | | | 4.1 | | | |

*Daily discharge, in second-feet, of Trinity River near Trinity Center, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | |
| 1 | | 240 | 1,170 | 480 | 2,300 | 1,430 | 1,730 | 745 | 210 | 89 |
| 2 | | 204 | 1,120 | 460 | 2,300 | 1,450 | 1,740 | 725 | 205 | 89 |
| 3 | | 168 | 980 | 440 | 2,200 | 1,470 | 1,760 | 695 | 200 | 89 |
| 4 | | 185 | 850 | 450 | 2,100 | 1,480 | 1,800 | 675 | 190 | 89 |
| 5 | | 202 | 710 | 600 | 2,000 | 1,490 | 1,840 | 655 | 185 | 89 |
| 6 | | 182 | 670 | 1,220 | 1,940 | 1,500 | 1,880 | 635 | 180 | 98 |
| 7 | | 162 | 635 | 1,220 | 1,800 | 1,460 | 1,920 | 605 | 175 | 106 |
| 8 | | 174 | 615 | 1,220 | 1,650 | 1,430 | 1,960 | 570 | 170 | 106 |
| 9 | | 185 | 585 | 1,220 | 1,550 | 1,400 | 2,000 | 530 | 165 | 106 |
| 10 | | 221 | 565 | 1,250 | 1,400 | 1,380 | 1,960 | 500 | 160 | 106 |
| 11 | | 212 | 585 | 1,290 | 1,300 | 1,370 | 1,920 | 480 | 154 | 106 |
| 12 | | 202 | 615 | 1,320 | 1,200 | 1,370 | 1,870 | 460 | 154 | 109 |
| 13 | | 232 | 635 | 1,220 | 1,100 | 1,370 | 1,830 | 440 | 154 | 113 |
| 14 | | 261 | 590 | 1,130 | 1,050 | 1,390 | 1,780 | 425 | 154 | 116 |
| 15 | 482 | 296 | 545 | 1,030 | 1,000 | 1,430 | 1,740 | 410 | 154 | 116 |
| 16 | 383 | 330 | 500 | 1,120 | 980 | 1,480 | 1,700 | 395 | 135 | 116 |
| 17 | 365 | 343 | 460 | 1,220 | 980 | 1,530 | 1,650 | 385 | 135 | 116 |
| 18 | 348 | 356 | 422 | 1,300 | 980 | 1,600 | 1,590 | 375 | 135 | 116 |
| 19 | 330 | 400 | 383 | 1,380 | 980 | 1,650 | 1,540 | 360 | 135 | 116 |
| 20 | 330 | 400 | 402 | 1,600 | 1,000 | 1,600 | 1,430 | 345 | 135 | 110 |
| 21 | 330 | 500 | 420 | 1,840 | 1,050 | 1,650 | 1,310 | 330 | 135 | 110 |
| 22 | 330 | 865 | 440 | 2,060 | 1,100 | 1,700 | 1,190 | 320 | 135 | 110 |
| 23 | 330 | 815 | 440 | 2,190 | 1,200 | 1,750 | 1,080 | 310 | 135 | 110 |
| 24 | 307 | 760 | 440 | 2,320 | 1,450 | 1,800 | 970 | 290 | 135 | 110 |
| 25 | 284 | 710 | 440 | 2,140 | 1,650 | 1,780 | 865 | 280 | 96 | 110 |
| 26 | 261 | 710 | 460 | 1,950 | 1,900 | 1,760 | 905 | 260 | 96 | 140 |
| 27 | 250 | 710 | 480 | 1,760 | 1,800 | 1,740 | 865 | 250 | 96 | 128 |
| 28 | 240 | 710 | 500 | 1,800 | 1,500 | 1,730 | 825 | 240 | 96 | 127 |
| 29 | 221 | 800 | | 1,800 | 1,400 | 1,720 | 785 | 235 | 96 | 125 |
| 30 | 202 | 950 | | 2,000 | 1,400 | 1,700 | 765 | 225 | 94 | 124 |
| 31 | 202 | 1,320 | | 2,200 | | 1,720 | | 220 | 91 | |

[illegible] II.

[illegible]

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

[illegible] II.

[illegible]

The gage is a vertical staff, in two sections, on the left bank at the bridge. Discharge measurements are made from the bridge or by wading.

The channel is composed of gravel and small bowlders and is fairly permanent.

Water is diverted above the station for use in irrigation, placer mining, and power development.

*Discharge measurements of Trinity River at Lewiston, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| | | *Feet.* | *Sec.-ft.* | | | *Feet.* | *Sec.-ft.* |
| 1910. | | | | 1911. | | | |
| Dec. 19 | H. D. McGlashan | 3.62 | 782 | Sept. 28 | H. J. Tompkins | 2.50 | 183 |
| 1911. | | | | 1912. | | | |
| Mar. 21 | G. T. Peekema | 6.38 | 4,330 | Jan. 31 | do | 4.00 | 1,010 |
| May 18 | do | 6.18 | 3,540 | July 23 | Lasley Lee | 3.23 | 535 |
| Aug. 28 | do | 2.31 | 162 | | | | |

*Daily gage height, in feet, of Trinity River at Lewiston, Cal., for 1911–12.*

| Day. | Aug. | Sept. | Day. | Aug. | Sept. | Day. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1911. | | | 1911. | | | 1911. | | |
| 1 | | 2.28 | 11 | | 2.39 | 21 | | 2.32 |
| 2 | | 2.30 | 12 | | 2.36 | 22 | | 2.32 |
| 3 | | 2.29 | 13 | | 2.38 | 23 | | 2.32 |
| 4 | | 2.30 | 14 | | 2.48 | 24 | | 2.31 |
| 5 | | 2.40 | 15 | | 2.39 | 25 | | 2.32 |
| 6 | | 2.32 | 16 | | 2.36 | 26 | | 2.53 |
| 7 | | 2.34 | 17 | | 2.35 | 27 | | 2.49 |
| 8 | | 2.34 | 18 | | 2.40 | 28 | 2.30 | 2.49 |
| 9 | | 2.34 | 19 | | 2.35 | 29 | 2.30 | 2.46 |
| 10 | | 2.35 | 20 | | 2.33 | 30 | 2.29 | 2.46 |
| | | | | | | 31 | 2.29 | |

*Monthly discharge of Trinity River at Lewiston, Cal., for 1911.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| September | 204 | 144 | 164 | 9,760 | B. |
| October | 264 | 170 | 196 | 12,100 | B. |
| November | 303 | 180 | 210 | 12,500 | B. |
| December | 288 | 180 | 214 | 13,200 | B. |

## TRINITY RIVER NEAR CHINA FLAT, CAL.

This station, which is located at the suspension footbridge, in sec. 15, T. 6 N., R. 5 E., about 2 miles above the junction with South Fork and 8 miles above China Flat, was established October 11, 1911.

he gage is a staff, in three sections, bolted to a rock ledge on the left bank, 40 feet above the bridge from which discharge measurements are made.

The channel is composed of gravel and bowlders which are partly covered with silt, the débris from placer mining.

A small amount of water is diverted above the station for use in irrigation, power development, and placer mining.

Estimates of discharge are withheld until additional data are secured.

*Discharge measurements of Trinity River near China Flat, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Dec. 31 | E. O. Christiansen | 5.00 | 588 | Feb. 8 | E. O. Christiansen | 9.69 | 3,490 |
| | | | | Apr. 15 | .....do | 8.88 | 3,510 |

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

*Discharge measurements of Trinity River at Hoopa, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Oct. 8 | E. O. Christiansen | 4.70 | 492 | Feb. 11 | E. O. Christiansen | 9.50 | 7,380 |
| Dec. 30 | ....do | 5.30 | 812 | Apr. 18 | ....do | 8.79 | 5,580 |

*Daily gage height, in feet, of Trinity River at Hoopa, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 4.65 | 4.71 | 4.92 | 5.3 | 8.9 | 8.2 | 9.1 | 15.6 | 11.5 |
| 2 | | 4.62 | 4.70 | 4.90 | 5.3 | 8.6 | 8.2 | 8.9 | 14.6 | 11.4 |
| 3 | 4.40 | 4.68 | 4.70 | 4.90 | 5.3 | 8.4 | 8.0 | 9.2 | 13.8 | 11.2 |
| 4 | 4.44 | 4.72 | 4.70 | 4.92 | 5.0 | 8.3 | 7.8 | 9.2 | 12.5 | 11.2 |
| 5 | 4.49 | 4.74 | 4.70 | 5.08 | 5.0 | 8.2 | 8.1 | 9.0 | 12.1 | 11.1 |
| 6 | 4.50 | 4.70 | 4.70 | 5.28 | 5.15 | 8.2 | 9.2 | 8.8 | 12.0 | 10.9 |
| 7 | 4.52 | 4.70 | 4.70 | 5.38 | 6.2 | 8.2 | 9.6 | 8.8 | 12.0 | 10.8 |
| 8 | 4.54 | 4.69 | 4.71 | 5.28 | 6.7 | 9.4 | 9.4 | 9.0 | 12.0 | 10.4 |
| 9 | 4.52 | 4.75 | 4.82 | 5.20 | 7.8 | 9.8 | 9.1 | 8.8 | 12.2 | 9.8 |
| 10 | 4.50 | 4.85 | 5.32 | 5.16 | 7.8 | 9.8 | 9.0 | 9.2 | 12.0 | 9.6 |
| 11 | 4.51 | 4.91 | 5.30 | 5.04 | 7.4 | 9.7 | 8.8 | 9.6 | 11.8 | 9.7 |
| 12 | 4.56 | 4.89 | 5.12 | 5.02 | 7.5 | 9.3 | 8.8 | 9.4 | 11.8 | 9.6 |
| 13 | 4.60 | 4.84 | 5.18 | 5.00 | 10.4 | 9.0 | 9.2 | 9.1 | 11.6 | 9.9 |
| 14 | 4.62 | 4.91 | 5.15 | 5.00 | 9.6 | 9.0 | 8.9 | 8.8 | 11.7 | 9.1 |
| 15 | 4.61 | 4.98 | 5.90 | 5.00 | 8.8 | 8.9 | 9.2 | 8.7 | 11.6 | 8.9 |
| 16 | 4.58 | 4.98 | 6.22 | 5.11 | 8.4 | 10.7 | 10.0 | 8.7 | 11.5 | 8.6 |
| 17 | 4.55 | 4.88 | 5.92 | 5.38 | 8.2 | 15.9 | 9.9 | 8.7 | 11.0 | 8.3 |
| 18 | 4.51 | 4.82 | 5.68 | 5.26 | 7.9 | 16.0 | 9.7 | 8.7 | 10.8 | 8.4 |
| 19 | 4.49 | 4.80 | 5.60 | 5.20 | 7.9 | 13.7 | 9.7 | 8.6 | 10.8 | 8.6 |
| 20 | 4.49 | 4.76 | 5.35 | 5.20 | 7.8 | 12.1 | 9.6 | 8.4 | 12.7 | 8.5 |
| 21 | 4.48 | 4.71 | 5.19 | 5.12 | 7.5 | 11.2 | 9.5 | 8.3 | 11.2 | 8.2 |
| 22 | 4.46 | 4.70 | 5.19 | 5.00 | 7.3 | 10.4 | 9.3 | 8.2 | 10.4 | 8.0 |
| 23 | 4.44 | 4.70 | 5.12 | 5.11 | 7.6 | 9.9 | 9.2 | 8.1 | 10.0 | 8.1 |
| 24 | 4.42 | 4.70 | 5.05 | 5.18 | 19.5 | 10.0 | 9.3 | 8.3 | 10.0 | 8.2 |
| 25 | 4.49 | 4.70 | 5.00 | 5.06 | 21.5 | 9.2 | 9.4 | 8.2 | 11.2 | 8.0 |
| 26 | 4.60 | 4.70 | 5.00 | 5.05 | 14.8 | 9.0 | 9.3 | 8.1 | 12.5 | 7.8 |
| 27 | 4.65 | 4.70 | 5.00 | 5.40 | 11.6 | 8.9 | 9.4 | 8.1 | 12.0 | 7.8 |
| 28 | 4.70 | 4.72 | 4.98 | 5.46 | 10.4 | 8.5 | 9.6 | 8.2 | 12.6 | 7.7 |
| 29 | 4.69 | 4.78 | 4.95 | 5.35 | 10.0 | 8.3 | 9.7 | 11.2 | 12.0 | 7.6 |
| 30 | 4.66 | 4.74 | 4.95 | 5.30 | 9.3 | | 9.6 | 13.2 | 12.6 | 7.4 |
| 31 | | 4.72 | | 5.26 | 9.2 | | 9.4 | | 11.0 | |

## COFFEE CREEK AT COFFEE, CAL.

This station, which is located at a private bridge at Coffee, 5 miles above the junction with Trinity River, in the NW. ¼ sec. 4, T. 37 N., R. 8 W., in the Shasta National Forest, was established December 16, 1910. Boulder Creek enters 400 feet above and Little Boulder Creek 1¼ miles below the station.

The gage is a vertical staff near the upstream end of the bridge pier near the right bank.

Discharge measurements are made from the bridge or by wading.

This stream is utilized by the Trinity Gold Mining & Reduction Co. to operate the mine near Carrville.

From April to July, inclusive, and occasionally throughout the remainder of the year, two dams with automatic or "self-shooting" gates are operated about 10 miles above the station. The Nash mine operates a dam having a working capacity of about 125 acre-feet.

The Holland mine, on the East Fork, operates a dam having a working capacity of about 40 acre-feet. At the beginning of the season, in April, these dams fill and "shoot" about once an hour; at the end of the season, in July, once in 20 or 24 hours. During high water the "floods" are hardly perceptible, but late in the season their effect is pronounced. It is endeavored to obtain gage-height readings when the flow is normal, but the record is subject to some error from April to July.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of Coffee Creek at Coffee, Cal., in 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | Feet. | Sec.-ft. | 1912. | | Feet. | Sec.-ft. |
| Dec. 16 | F. G. Wood | 4.17 | 176 | Feb. 5 | H. J. Tompkins | 3.96 | [illegible] |
| | | | | July 28 | Lesley Lee | 4.03 | 165 |
| 1911. | | | | 29 | ....do | 3.97 | [illegible] |
| May 20 | G. T. Peckham | 5.20 | 739 | | | | |
| Aug. 18 | ....do | 3.54 | 62 | | | | |
| Oct. 3 | H. J. Tompkins | 3.49 | 41 | | | | |

*Daily gage height, in feet, of Coffee Creek at Coffee, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | |
| 1 | | 3.75 | 4.40 | 4.0 | 5.5 | 5.5 | 5.8 | 4.9 | 3.8 | 3.35 |
| 2 | | 3.80 | 4.30 | 4.1 | 5.4 | 5.5 | 5.9 | 4.9 | 3.75 | 3.35 |
| 3 | | 3.80 | 4.20 | 4.1 | 5.4 | 5.6 | 5.9 | 4.8 | 3.7 | 3.35 |
| 4 | | 3.75 | 4.10 | 4.05 | 5.4 | 5.6 | 5.5 | 4.7 | 3.7 | 3.35 |
| 5 | | 3.73 | 4.10 | 4.15 | 5.4 | 5.6 | 5.5 | 4.65 | 3.65 | 3.36 |
| 6 | | 3.72 | 4.00 | 4.7 | 5.3 | 5.6 | 5.5 | 4.6 | 3.6 | 3.35 |
| 7 | | 3.75 | 3.95 | 4.6 | 5.4 | 5.5 | 5.55 | 4.6 | 3.6 | 3.37 |
| 8 | | 3.75 | 3.90 | 4.5 | 5.3 | 5.5 | 5.4 | 4.55 | 3.6 | 3.37 |
| 9 | | 3.78 | 3.93 | 4.3 | 5.3 | 5.4 | 5.6 | 4.55 | 3.55 | 3.35 |
| 10 | | 3.73 | 3.95 | 4.25 | 5.2 | 5.5 | 5.6 | 4.5 | 3.55 | 3.38 |
| 11 | | 3.70 | 3.97 | 4.2 | | 5.5 | 5.7 | 4.5 | 3.55 | 3.38 |
| 12 | | 3.68 | 4.00 | 4.15 | 5.0 | 5.4 | 5.6 | 4.5 | 3.55 | 3.38 |
| 13 | | 3.67 | 4.00 | 4.15 | 4.9 | 5.4 | 5.7 | 4.45 | 3.55 | 3.36 |
| 14 | | 3.65 | 4.08 | 4.2 | 4.9 | 5.4 | 5.6 | 4.4 | 3.55 | 3.38 |
| 15 | | 3.64 | 3.97 | 4.2 | 4.9 | 5.3 | 5.8 | 4.4 | 3.55 | 3.38 |
| 16 | 4.17 | 3.63 | 3.95 | 4.3 | 4.9 | 5.3 | 5.8 | 4.35 | 3.55 | 3.38 |
| 17 | 4.15 | 3.65 | 3.98 | 4.45 | 5.1 | 5.3 | 5.5 | 4.35 | 3.50 | 3.39 |
| 18 | 4.15 | 3.70 | 3.93 | 4.5 | 5.1 | 5.2 | 5.5 | 4.3 | 3.50 | 3.39 |
| 19 | 4.00 | 3.85 | 3.92 | 4.6 | 5.1 | 5.3 | 5.7 | 4.3 | 3.50 | 3.40 |
| 20 | 3.92 | 3.85 | 3.91 | 4.68 | 5.2 | 5.25 | 5.6 | 4.25 | 3.50 | 3.40 |
| 21 | 3.90 | 3.82 | 3.92 | 4.8 | 5.2 | 5.3 | 5.5 | 4.2 | 3.48 | 3.40 |
| 22 | 3.88 | 3.80 | 3.95 | 4.9 | 5.2 | 5.4 | 5.4 | 4.2 | 3.48 | 3.42 |
| 23 | 3.87 | 3.80 | 3.96 | 4.95 | 5.4 | 5.5 | 5.2 | 4.1 | 3.48 | 3.42 |
| 24 | 3.87 | 3.80 | 4.00 | 5.0 | 5.6 | 5.6 | 5.2 | 4.05 | 3.47 | 3.42 |
| 25 | 3.86 | 3.85 | 4.00 | 4.95 | 5.6 | 5.5 | 5.1 | 4.05 | 3.47 | 3.42 |
| 26 | 3.86 | 3.87 | 4.07 | 5.0 | 5.8 | 5.5 | 5.05 | 4.0 | 3.46 | 3.42 |
| 27 | 3.84 | 3.90 | 4.05 | 5.0 | 5.5 | 5.5 | 5.1 | 4.0 | 3.45 | 3.42 |
| 28 | 3.82 | 3.90 | 4.00 | 5.0 | 5.5 | 5.6 | 5.05 | 3.95 | 3.40 | 3.42 |
| 29 | 3.80 | 3.98 | | 4.95 | 5.5 | 5.6 | 5.05 | 3.9 | 3.40 | 3.42 |
| 30 | 3.73 | 4.20 | | 5.05 | 5.6 | 5.7 | 5.0 | 3.9 | 3.38 | 3.42 |
| 31 | 3.75 | 4.80 | | 5.3 | | 5.8 | | 3.85 | 3.35 | |

*Daily gage height, in feet, of Coffee Creek at Coffee, Cal., for 1910–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | | |
| 1 | 3.42 | 3.48 | 3.37 | 3.5 | 3.9 | 4.0 | ........ | 4.8 | ........ |
| 2 | 3.42 | 3.48 | 3.38 | 3.5 | 3.9 | 4.0 | ........ | 4.7 | 6.8 |
| 3 | 4.00 | 3.50 | 3.38 | 3.5 | 3.87 | 4.0 | ........ | 4.7 | 7.0 |
| 4 | 3.42 | 3.50 | 3.40 | 3.5 | 3.85 | 4.0 | ........ | 4.9 | 7.0 |
| 5 | 3.42 | 3.50 | 3.40 | 3.5 | 3.8 | 4.1 | ........ | 5.2 | 7.0 |
| 6 | 3.41 | 3.52 | 3.40 | 3.5 | 3.85 | 4.1 | ........ | 5.3 | ........ |
| 7 | 3.42 | 3.52 | 3.40 | 3.55 | 3.85 | 4.1 | ........ | 5.5 | 6.8 |
| 8 | 3.42 | 3.52 | 3.40 | 3.6 | 3.9 | 4.0 | ........ | 5.5 | 6.5 |
| 9 | 3.42 | 3.52 | 3.42 | 3.7 | 3.95 | 4.0 | ........ | 5.5 | 5.8 |
| 10 | 3.42 | 3.52 | 3.42 | 3.75 | 4.0 | 4.0 | ........ | 5.6 | ........ |
| 11 | 3.42 | 3.52 | 3.45 | 3.8 | 4.1 | 4.0 | ........ | 5.6 | ........ |
| 12 | 3.42 | 3.55 | 3.45 | 3.85 | 4.1 | 4.0 | ........ | 5.7 | 5.5 |
| 13 | 3.42 | 3.55 | 3.45 | 3.9 | 4.15 | 4.0 | ........ | 5.8 | ........ |
| 14 | 3.42 | 3.58 | 3.45 | 3.9 | ........ | 4.0 | ........ | 5.8 | ........ |
| 15 | 3.42 | 3.58 | 3.45 | 3.95 | 4.2 | 4.0 | ........ | 5.8 | ........ |
| 16 | 3.42 | 3.60 | 3.45 | 3.95 | 4.6 | 4.0 | ........ | ........ | 5.0 |
| 17 | 3.42 | 3.58 | 3.45 | 3.95 | 5.6 | 4.0 | ........ | ........ | ........ |
| 18 | 3.43 | 3.55 | 3.45 | 3.95 | 5.2 | 4.0 | ........ | 5.6 | ........ |
| 19 | 3.43 | 3.50 | 3.47 | 4.0 | 5.0 | 3.9 | ........ | 5.7 | ........ |
| 20 | 3.44 | 3.50 | 3.47 | 4.2 | 4.5 | 3.9 | ........ | 5.6 | 5.0 |
| 21 | 3.44 | 3.48 | 3.47 | 4.25 | ........ | 3.9 | ........ | 5.7 | 5.0 |
| 22 | 3.44 | 3.48 | 3.48 | 4.5 | 4.2 | 4.0 | ........ | 5.8 | 5.0 |
| 23 | 3.44 | 3.45 | 3.48 | 5.2 | 4.2 | 4.0 | 4.5 | 5.8 | 5.2 |
| 24 | 3.44 | 3.42 | ........ | 5.3 | 4.15 | 4.1 | 4.5 | 6.2 | ........ |
| 25 | 3.45 | 3.40 | ........ | 5.2 | 4.1 | 4.2 | 4.5 | 6.5 | ........ |
| 26 | 3.45 | 3.38 | 3.50 | 4.5 | 4.05 | 4.2 | 4.6 | 6.5 | 5.0 |
| 27 | 3.45 | 3.38 | 3.50 | 4.3 | 4.05 | 4.3 | 4.6 | 7.0 | 4.9 |
| 28 | 3.46 | 3.35 | 3.50 | 4.1 | 4.0 | 4.4 | 4.7 | 6.8 | ........ |
| 29 | 3.46 | 3.35 | 3.50 | 4.0 | 4.0 | 4.5 | 4.8 | 6.8 | ........ |
| 30 | 3.48 | 3.35 | 3.50 | 4.0 | ........ | 4.6 | 4.8 | 6.8 | 4.9 |
| 31 | 3.48 | ........ | 3.50 | 3.9 | ........ | 4.65 | ........ | ........ | ........ |

*Daily discharge, in second-feet, of Coffee Creek at Coffee, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | |
| 1 | ........ | 86 | 258 | 133 | 1,000 | 1,000 | 1,290 | 510 | 93 | 40 |
| 2 | ........ | 93 | 222 | 159 | 910 | 1,000 | 1,390 | 510 | 86 | 40 |
| 3 | ........ | 93 | 189 | 159 | 910 | 1,100 | 1,390 | 445 | 78 | 40 |
| 4 | ........ | 86 | 159 | 146 | 910 | 1,100 | 1,000 | 390 | 78 | 40 |
| 5 | ........ | 82 | 159 | 174 | 910 | 1,100 | 1,000 | 365 | 72 | 40 |
| 6 | ........ | 81 | 133 | 390 | 820 | 1,190 | 1,000 | 340 | 65 | 40 |
| 7 | ........ | 86 | 122 | 340 | 910 | 1,000 | 1,050 | 340 | 65 | 41 |
| 8 | ........ | 86 | 111 | 297 | 820 | 1,000 | 910 | 318 | 65 | 41 |
| 9 | ........ | 90 | 118 | 222 | 820 | 910 | 1,100 | 318 | 60 | 42 |
| 10 | ........ | 82 | 122 | 206 | 735 | 1,000 | 1,100 | 297 | 60 | 42 |
| 11 | ........ | 78 | 126 | 189 | 658 | 1,000 | 1,190 | 297 | 60 | 42 |
| 12 | ........ | 75 | 133 | 174 | 580 | 910 | 1,100 | 297 | 60 | 42 |
| 13 | ........ | 74 | 133 | 174 | 510 | 910 | 1,190 | 278 | 60 | 42 |
| 14 | ........ | 72 | 133 | 189 | 510 | 910 | 1,100 | 258 | 60 | 42 |
| 15 | ........ | 70 | 126 | 189 | 510 | 820 | 1,290 | 258 | 60 | 42 |
| 16 | 180 | 69 | 122 | 222 | 510 | 820 | 1,290 | 240 | 60 | 42 |
| 17 | 174 | 72 | 118 | 278 | 655 | 820 | 1,000 | 240 | 54 | 43 |
| 18 | 174 | 78 | 118 | 297 | 655 | 735 | 1,000 | 222 | 54 | 43 |
| 19 | 133 | 102 | 115 | 340 | 655 | 820 | 1,190 | 222 | 54 | 44 |
| 20 | 115 | 102 | 113 | 370 | 735 | 778 | 1,100 | 205 | 54 | 44 |
| 21 | 111 | 97 | 115 | 445 | 735 | 820 | 1,000 | 189 | 52 | 44 |
| 22 | 107 | 93 | 122 | 510 | 735 | 910 | 910 | 189 | 52 | 46 |
| 23 | 106 | 93 | 124 | 545 | 910 | 1,000 | 735 | 159 | 52 | 46 |
| 24 | 106 | 93 | 133 | 580 | 1,100 | 1,100 | 735 | 146 | 51 | 46 |
| 25 | 104 | 102 | 133 | 545 | 1,100 | 1,000 | 655 | 146 | 51 | 46 |
| 26 | 104 | 106 | 151 | 580 | 1,290 | 1,000 | 618 | 133 | 50 | 46 |
| 27 | 100 | 111 | 146 | 580 | 1,000 | 1,000 | 655 | 133 | 49 | 46 |
| 28 | 97 | 111 | 133 | 580 | 1,000 | 1,100 | 618 | 122 | 44 | 46 |
| 29 | 93 | 129 | ........ | 545 | 1,000 | 1,100 | 618 | 111 | 44 | 46 |
| 30 | 90 | 189 | ........ | 618 | 1,100 | 1,190 | 580 | 111 | 42 | 46 |
| 31 | 86 | 340 | ........ | 820 | ........ | 1,290 | ........ | 102 | 40 | ........ |

*Daily discharge, in second-feet, of Coffee Creek at Coffee, Cal., for 1910–1912—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 46 | 52 | 41 | 54 | 111 | 133 | | 445 | 2,300 |
| 2 | 46 | 52 | 42 | 54 | 111 | 133 | | 380 | 2,300 |
| 3 | 46 | 54 | 42 | 54 | 106 | 133 | | 380 | 2,520 |
| 4 | 46 | 54 | 44 | 54 | 102 | 133 | | 510 | 2,520 |
| 5 | 46 | 54 | 44 | 54 | 98 | 150 | | 735 | 2,520 |
| 6 | 45 | 55 | 44 | 54 | 102 | 150 | | 920 | [illegible] |
| 7 | 46 | 55 | 44 | 60 | 102 | 150 | | 1,080 | 2,360 |
| 8 | 46 | 55 | 44 | 65 | 111 | 133 | | 1,080 | 2,150 |
| 9 | 46 | 55 | 46 | 78 | 122 | 133 | | 1,080 | 1,230 |
| 10 | 46 | 55 | 46 | 88 | 133 | 133 | | 1,100 | 1,140 |
| 11 | 46 | 55 | 46 | 98 | 150 | 133 | | 1,100 | 1,040 |
| 12 | 46 | 60 | 49 | 102 | 150 | 133 | | 1,190 | 940 |
| 13 | 46 | 60 | 49 | 111 | 174 | 133 | | 1,200 | 830 |
| 14 | 46 | 63 | 49 | 111 | 192 | 133 | | 1,200 | 730 |
| 15 | 46 | 63 | 49 | 122 | 180 | 133 | | 1,200 | 630 |
| 16 | 45 | 65 | 49 | 122 | 340 | 133 | | 1,220 | 580 |
| 17 | 46 | 63 | 49 | 122 | 1,100 | 133 | | 1,160 | 520 |
| 18 | 47 | 60 | 49 | 122 | 735 | 133 | | 1,160 | 520 |
| 19 | 47 | 54 | 51 | 133 | 580 | 111 | | 1,190 | 520 |
| 20 | 48 | 54 | 51 | 180 | 297 | 111 | | 1,100 | 520 |
| 21 | 46 | 52 | 51 | 286 | 243 | 111 | | 1,190 | 580 |
| 22 | 46 | 52 | 52 | 297 | 180 | 133 | | 1,200 | 520 |
| 23 | 48 | 49 | 52 | 735 | 180 | 133 | 297 | 1,200 | 480 |
| 24 | 48 | 46 | 53 | 820 | 174 | 150 | 297 | 1,720 | 630 |
| 25 | 49 | 44 | 53 | 735 | 150 | 180 | 297 | 2,060 | 560 |
| 26 | 46 | 42 | 54 | 297 | 146 | 180 | 340 | 2,060 | 580 |
| 27 | 49 | 42 | 54 | 222 | 146 | 222 | 340 | 2,620 | 465 |
| 28 | 50 | 49 | 54 | 150 | 133 | 258 | 380 | 2,300 | 465 |
| 29 | 50 | 49 | 54 | 133 | 133 | 297 | 445 | 2,300 | 465 |
| 30 | 52 | 49 | 54 | 133 | | 340 | 445 | 2,200 | 465 |
| 31 | 52 | | 54 | 111 | | 385 | | 2,300 | |

NOTE.—Daily discharge determined from a fairly well defined rating curve. Discharge Oct. 3, 1911, estimated.

*Monthly discharge of Coffee Creek at Coffee, Cal., for 1910–1912.*

| Month. | Discharge in second-feet. | | | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|
| | Maximum. | Minimum. | Mean. | | |
| **1910–11.** | | | | | |
| December 16–31 | 180 | 86 | 118 | 3,750 | B. |
| January | 340 | 69 | 101 | 6,210 | B. |
| February | 258 | 111 | 139 | 7,720 | B. |
| March | 820 | 133 | 355 | 21,900 | B. |
| April | 1,200 | 510 | 823 | 49,000 | B. |
| May | 1,200 | 735 | 979 | 60,200 | B. |
| June | 1,390 | 580 | 993 | 59,100 | B. |
| July | 510 | 102 | 255 | 15,700 | B. |
| August | 93 | 40 | 58.9 | 3,620 | B. |
| September | 46 | 40 | 42.0 | 2,500 | B. |
| The period | | | | 230,000 | |
| **1911–12.** | | | | | |
| October | 52 | 45 | 47.3 | 2,910 | B. |
| November | 65 | 40 | 53.0 | 3,150 | B. |
| December | 54 | 41 | 48.9 | 3,010 | B. |
| January | 820 | 54 | 183 | 11,200 | A. |
| February | 1,100 | 93 | 225 | 12,900 | A. |
| March | 385 | 111 | 164 | 10,100 | A. |
| April 23–30 | 445 | 297 | 356 | 5,650 | A. |
| May | 2,620 | 380 | 1,330 | 81,800 | B. |
| June | 2,630 | 465 | 1,140 | 67,800 | B. |

## EAST FORK OF TRINITY RIVER NEAR TRINITY CENTER, CAL.

This station, which is located at the highway bridge 2¼ miles southeast of Trinity Center and one-fourth mile above the junction with Trinity River, in the SW. ¼ sec. 15, T. 36 N., R. 7 W., in the Shasta National Forest, was established December 15, 1910.

The gage is a vertical staff on the downstream end of the left abutment of the bridge.

Discharge measurements are made from the bridge or by wading.

The water of this stream is used to irrigate about 400 acres of land. The principal diversion canal, that belonging to the Trinity Farm & Cattle Co., heads about 4 miles above the station.

This station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of East Fork of Trinity River near Trinity Center, Cal., 1910–1912.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1910. | | *Feet.* | *Sec.-ft.* | 1911. | | *Feet.* | *Sec.-ft.* |
| Dec. 15 | F. G. Wood | 4.77 | 238 | Aug. 20 | G. T. Peekema | 3.44 | 6.7 |
| | | | | Oct. 2 | H. J. Tompkins | 3.55 | 12 |
| 1911. | | | | | | | |
| Apr. 5 | G. T. Peekema | 6.25 | 1,160 | 1912. | | | |
| May 19 | .....do | 5.55 | 701 | Feb. 6 | H. J. Tompkins | 4.46 | 132 |

*Daily gage height, in feet, of East Fork of Trinity River near Trinity Center, Cal., for 1910–1912.*

| Day. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1910-11. | | | | | | | | | | |
| 1 | | 4.0 | 6.3 | | | | | | | 3.4 |
| 2 | | | | | | | | | | |
| 3 | | 4.1 | | 5.7 | | | 5.7 | | | |
| 4 | | | | | | | | | 3.5 | |
| 5 | | 4.05 | 5.8 | | 6.25 | | | | | |
| 6 | | | | 5.6 | | 5.95 | | 4.1 | | |
| 7 | | 4.0 | 5.75 | | | 5.9 | | | | |
| 8 | | | | | | 5.8 | | | | |
| 9 | | 4.05 | | 5.4 | | 5.6 | 5.4 | | | |
| 10 | | 4.08 | 5.5 | | | | | 4.05 | | |
| 11 | | | | | | | | | 3.45 | 3.5 |
| 12 | | 3.95 | | 5.3 | | | | | | |
| 13 | | | 5.7 | | | | | 3.95 | | |
| 14 | | 4.15 | | | | | | | | 3.5 |
| 15 | 4.77 | | | 5.25 | | 5.6 | 5.2 | | | |
| 16 | | 4.2 | 5.4 | | | | | | | |
| 17 | 4.5 | 4.3 | | 5.5 | | | | | | |
| 18 | | | | | | | | | | |
| 19 | 4.3 | | 5.3 | 5.65 | | 5.55 | 4.8 | | | |
| 20 | | | | | | 5.5 | | | 3.44 | |
| 21 | 4.2 | | | | | | | 3.8 | 3.4 | |
| 22 | | 4.2 | 5.0 | 5.9 | | | | | | |
| 23 | 4.15 | | | | | | 4.6 | | | |
| 24 | | | 5.4 | 6.2 | | | | | | |
| 25 | | 4.3 | | | | | | | | |
| 26 | 4.0 | | | | | 5.8 | 4.45 | | | |
| 27 | | | 5.55 | 5.8 | | | | | | 3.6 |
| 28 | 4.0 | 4.9 | | | | | | 3.7 | 3.4 | |
| 29 | | | | | 5.7 | | 4.3 | | | |
| 30 | 4.05 | | | | | 5.8 | | | | |
| 31 | 4.0 | 6.4 | | 6.1 | | | | | | |

Daily gage height, in feet, of East Fork of Trinity River near Trinity Center, Cal., for 1910 and 1912—Continued.

[illegible]

Daily discharge, in second-feet, of East Fork of Trinity River near Trinity Center, Cal., for 1910–1912.

| Day. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|---|
| 1910–1. | | | | | | | | | |
| 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 9 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 11 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 15 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 16 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 17 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 18 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 19 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 20 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 21 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 22 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 23 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 24 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 25 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 26 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 29 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily discharge, in second-feet, of East Fork of Trinity River near Trinity Center, Cal., for 1910–1912*—Continued.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | May. | June. |
|---|---|---|---|---|---|---|---|---|
| 1911-12. | | | | | | | | |
| 1 | 11 | 14 | 13 | | | 115 | | |
| 2 | 11 | 14 | 13 | | | | | |
| 3 | 12 | 14 | 13 | | | | | 770 |
| 4 | 12 | 14 | 13 | | | | | |
| 5 | 12 | 15 | 13 | | | | | |
| 6 | 13 | 15 | 13 | | 133 | | 885 | |
| 7 | 13 | 15 | 13 | | | | 925 | |
| 8 | 13 | 15 | 14 | | 180 | | | |
| 9 | 13 | 15 | 14 | | | | | 370 |
| 10 | 13 | 15 | 14 | | 300 | | | |
| 11 | 13 | 15 | 14 | | | | | |
| 12 | 13 | 15 | 14 | | | | 1,090 | |
| 13 | 13 | 15 | 14 | | | | | |
| 14 | 13 | 15 | 14 | | | | | 300 |
| 15 | 13 | 15 | 14 | | | | 1,220 | |
| 16 | 13 | 15 | 14 | | | | | |
| 17 | 13 | 15 | 14 | | | | | |
| 18 | 13 | 15 | 14 | | | | | |
| 19 | 13 | 15 | 14 | | | | | |
| 20 | 13 | 15 | 14 | | | | | |
| 21 | 13 | 15 | 15 | 52 | | | | |
| 22 | 13 | 15 | 15 | | | | 630 | |
| 23 | 14 | 15 | 15 | | 235 | | | |
| 24 | 14 | 13 | 15 | | | | | 300 |
| 25 | 14 | 13 | 15 | | | | 2,610 | |
| 26 | 14 | 13 | 15 | | 180 | 450 | | |
| 27 | 14 | 13 | 15 | | | | | 115 |
| 28 | 14 | 13 | 15 | | | | | |
| 29 | 14 | 13 | 15 | | | | | |
| 30 | 14 | 13 | 15 | 180 | | | | |
| 31 | 14 | | 15 | | | 395 | | |

NOTE.—Daily discharge determined from a well-defined rating curve. Discharge interpolated or estimated for days on which the gage was not read during 1910-11.

*Monthly discharge of East Fork of Trinity River near Trinity Center, Cal., for 1910–11.*

| Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Accuracy. | Month. | Mean discharge in second-feet. | Run-off (total in acre-feet). | Accuracy. |
|---|---|---|---|---|---|---|---|
| 1910-11. | | | | 1910-11. | | | |
| December 15-31 | 82.8 | 2,790 | B. | September | 9.7 | 577 | C. |
| January | 156 | 9,590 | C. | The period | | 224,000 | |
| February | 694 | 38,500 | C. | 1911. | | | |
| March | 758 | 46,600 | C. | October | 13.1 | 806 | C. |
| April | 852 | 50,700 | D. | November | 14.4 | 857 | C. |
| May | 790 | 48,600 | C. | December | 14.1 | 867 | C. |
| June | 408 | 24,300 | C. | | | | |
| July | 36.2 | 2,230 | C. | | | | |
| August | 7.5 | 461 | C. | | | | |

## SWIFT CREEK NEAR TRINITY CENTER, CAL.

This station, which is located one-fourth mile above the junction with the North Fork of Swift Creek, 2½ miles southwest of Trinity Center, in the E. ½ sec. 13, T. 36 N., R. 8 W., in the Shasta National Forest, was established December 17, 1910.

No water is diverted above the station. Water is diverted below for placer mining in the vicinity of Trinity Center.

[illegible] gage is a vertical staff fastened to a cedar tree on the left bank [illegible] feet below the foot log from which discharge measurements are made [illegible] a low-water section was installed [illegible] the same as the original gage but at a different datum.

Estimates of discharge for 1912 are withheld until additional data are secured.

The station is maintained in cooperation with the United States Forest Service.

*Discharge measurements of [illegible] Creek near [illegible], Cal., in 1910–1912.*

| Date | Hydrographer | Width | Area of section | Gage height | Discharge | [illegible] |
|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of [illegible] Creek near [illegible], Cal., for 1910–1912.*

| Day | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

*Daily gage height, in feet, of Swift Creek near Trinity Center, Cal., for 1910–1912*—Contd.

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 1.5 | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | 1.50 | | | | | | | |
| 5 | | | | | | | | 2.42 | |
| 6 | | | | | 2.06 | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | 1.52 | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | 2.9 | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | 2.8 |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | 2.4 | | | | |
| 20 | | | | | | 2.0 | | | |
| 21 | | | | | 2.2 | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |
| 25 | | 1.50 | | | 2.1 | | | | 2.4 |
| 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | 1.50 | | | | | | | 3.2 | |
| 29 | | | | | 2.0 | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |

*Daily discharge, in second-feet, of Swift Creek near Trinity Center, Cal., for 1910–1911.*

| Day. | Dec. | Jan. | Apr. | May. | June. | July. | Aug. |
|---|---|---|---|---|---|---|---|
| 1 | | 19 | 350 | 450 | 610 | 172 | 28 |
| 2 | | 14 | 340 | 450 | 670 | 164 | 27 |
| 3 | | 10 | 330 | 450 | 670 | 156 | 26 |
| 4 | | 19 | 330 | 460 | 350 | 148 | 25 |
| 5 | | 13 | 320 | 520 | 350 | 140 | 25 |
| 6 | | 7.5 | 307 | 480 | 370 | 133 | 25 |
| 7 | | 7 | 300 | 440 | 400 | 125 | 25 |
| 8 | | 7 | 300 | 405 | 300 | 117 | 25 |
| 9 | | 7.5 | 280 | 370 | 405 | 116 | 25 |
| 10 | | 10 | 270 | 400 | 460 | 114 | 25 |
| 11 | | 13 | 240 | 400 | 520 | 113 | 25 |
| 12 | | 16 | 210 | 380 | 520 | 111 | 25 |
| 13 | | 19 | 180 | 360 | 520 | 110 | 26 |
| 14 | | 22 | 180 | 350 | 520 | 109 | 26 |
| 15 | | 25 | 180 | 330 | 600 | 107 | 26 |
| 16 | | 31 | 180 | 310 | 600 | 106 | 26 |
| 17 | 114 | 37 | 210 | 300 | 450 | 104 | 26 |
| 18 | 106 | 43 | 240 | 280 | 450 | 103 | 26 |
| 19 | 97 | | 250 | 263 | 550 | 94 | 26 |
| 20 | 89 | | 250 | 263 | 450 | 85 | |
| 21 | 77 | | 260 | 310 | 300 | 75 | |
| 22 | 65 | | 270 | 360 | 242 | 65 | |
| 23 | 65 | | 350 | 410 | 234 | 55 | |
| 24 | 65 | | 420 | 460 | 226 | 46 | |
| 25 | 54 | | 500 | 360 | 219 | 43 | |
| 26 | 42 | | 600 | 360 | 211 | 40 | |
| 27 | 31 | | 450 | 354 | 203 | 37 | |
| 28 | 31 | | 450 | 400 | 195 | 35 | |
| 29 | 31 | | 450 | 450 | 187 | 33 | |
| 30 | 28 | | 450 | 510 | 179 | 31 | |
| 31 | 25 | | | 560 | | 29 | |

NOTE.—Daily discharge determined from a rating curve applicable as follows: Dec. 17, 1910, to Aug. 19, 1911. Discharge interpolated or estimated for days on which the gage was not read.

[illegible] for 191[illegible]–[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | Aug. | Sep. |
|---|---|---|---|---|---|---|
| | [illegible] | | | [illegible] | | |
| | | | [illegible] | [illegible] | | [illegible] |
| | | | [illegible] | [illegible] | | [illegible] |
| | | | [illegible] | [illegible] | 1.4 | [illegible] |
| | | | [illegible] | 24 | 1.4 | [illegible] |
| | | | [illegible] | [illegible] | 1.4 | [illegible] |
| | | | [illegible] | 26 | 1.4 | [illegible] |
| | | | [illegible] | 27 | [illegible] | 1.4 |
| | | | [illegible] | 28 | [illegible] | 1.4 |
| | | | [illegible] | 29 | 1.35 | 1.4 |
| | | | 1.35 | 30 | 1.3 | 1.4 |
| | | | | 31 | 1.3 | ... |

*Daily gage height, in feet, of North Fork of Trinity River at Helena, Cal., for 1911–12—Continued.*

| Day. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June |
|---|---|---|---|---|---|---|---|---|---|
| 1911–12. | | | | | | | | | |
| 1 | 1.4 | 1.4 | 1.45 | 1.45 | 2.65 | 2.5 | 2.95 | 5.2 | 3.6 |
| 2 | 1.4 | 1.4 | 1.45 | 1.45 | 2.65 | 2.5 | 2.95 | 4.5 | 3.6 |
| 3 | 1.4 | 1.4 | 1.45 | 1.45 | 2.65 | 2.65 | 2.9 | 4.4 | 3.6 |
| 4 | 1.4 | 1.4 | 1.45 | 1.45 | 2.65 | 2.6 | 2.95 | 4.0 | 3.6 |
| 5 | 1.4 | 1.4 | 1.45 | 1.45 | 2.65 | 2.75 | 2.95 | 3.8 | 3.6 |
| 6 | 1.4 | 1.4 | 1.55 | 1.45 | 2.7 | 2.9 | 2.95 | 3.9 | 3.6 |
| 7 | 1.4 | 1.4 | 1.7 | 1.7 | 2.8 | 2.9 | 2.9 | 4.0 | 3.5 |
| 8 | 1.5 | 1.4 | 1.65 | 2.1 | 3.5 | 2.9 | 2.9 | 4.0 | 3.45 |
| 9 | 1.5 | 1.4 | 1.6 | 2.6 | 3.5 | 2.8 | 2.9 | 4.0 | 3.45 |
| 10 | 1.5 | 1.55 | 1.55 | 2.8 | 2.9 | 2.75 | 3.05 | 3.8 | 3.4 |
| 11 | 1.5 | 1.45 | 1.55 | 3.0 | 2.85 | 2.7 | 3.0 | 3.8 | 3.4 |
| 12 | 1.5 | 1.45 | 1.5 | 3.0 | 2.85 | 2.7 | 3.0 | 3.8 | 3.4 |
| 13 | 1.55 | 1.45 | 1.5 | 4.2 | 3.0 | 2.8 | 2.95 | 3.7 | 3.3 |
| 14 | 1.55 | 1.45 | 1.5 | 4.0 | 3.05 | 2.8 | 2.9 | 3.7 | 3.25 |
| 15 | 1.55 | 1.45 | 1.5 | 3.1 | 3.6 | 2.85 | 2.9 | 3.7 | 3.15 |
| 16 | 1.5 | 1.55 | 1.5 | 2.6 | 4.7 | 2.85 | 2.9 | 3.7 | 3.0 |
| 17 | 1.45 | 2.0 | 1.5 | 2.4 | 7.6 | 2.85 | 2.85 | 3.7 | 3.0 |
| 18 | 1.4 | 1.8 | 1.5 | 2.3 | 5.2 | 2.85 | 2.85 | 3.6 | 2.9 |
| 19 | 1.4 | 1.65 | 1.5 | 2.2 | 4.4 | 2.9 | 2.8 | 3.6 | 2.85 |
| 20 | 1.4 | 1.5 | 1.5 | 2.2 | 4.0 | 2.95 | 2.7 | 3.6 | 2.8 |
| 21 | 1.4 | 1.45 | 1.5 | 2.25 | 3.6 | 2.95 | 2.7 | 3.6 | 2.7 |
| 22 | 1.4 | 1.45 | 1.5 | 2.15 | 3.5 | 2.9 | 2.7 | 3.6 | 2.6 |
| 23 | 1.4 | 1.45 | 1.5 | 2.1 | 3.4 | 2.9 | 2.65 | 3.6 | 2.55 |
| 24 | 1.4 | 1.45 | 1.5 | 3.0 | 3.35 | 2.9 | 2.6 | 3.6 | 2.5 |
| 25 | 1.4 | 1.45 | 1.5 | 7.6 | 3.25 | 2.9 | 2.55 | 3.6 | 2.45 |
| 26 | 1.4 | 1.45 | 1.5 | 7.0 | 3.15 | 2.9 | 2.5 | 3.6 | 2.45 |
| 27 | 1.4 | 1.45 | 1.5 | 5.6 | 3.05 | 3.0 | 2.5 | 3.6 | 2.45 |
| 28 | 1.4 | 1.45 | 1.55 | 4.8 | 2.85 | 3.1 | 2.5 | 3.6 | 2.4 |
| 29 | 1.4 | 1.45 | 1.55 | 3.2 | 2.7 | 3.1 | 2.65 | 3.6 | 2.4 |
| 30 | 1.4 | 1.45 | 1.5 | 3.05 | ....... | 3.1 | 4.0 | 3.7 | 2.35 |
| 31 | 1.4 | ....... | 1.5 | 2.8 | ....... | 3.0 | ....... | 3.6 | ....... |

## SOUTH FORK OF TRINITY RIVER NEAR CHINA FLAT, CAL.

This station, which is located at the suspension footbridge in sec. 17, T. 6 N., R. 5 E., one-fourth mile above the junction with Trinity River, about 6 miles above China Flat, was established October 12, 1911.

The gage is a vertical staff bolted to a rock ledge on the right bank, 30 feet above the bridge. The channel is composed of bowlders and gravel and appears permanent. Discharge measurements are made from the suspension bridge or by wading.

Estimates of discharge are withheld until additional data are secured.

*Miscellaneous measurements in Klamath River drainage basin*—Continued.

| Date. | Stream. | Tributary to— | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| June 30, 1907 | Fall Creek | Klamath River | Sec. 30, T. 48 N., R. 4 W., Cal. | 50 |
| June 26, 1907 | Shasta River | do | 4 miles northeast Yreka, Cal. | 230 |
| Aug. 29, 1905 | do | do | 5 miles northeast Yreka, Cal. | 10 |
| Aug. 22, 1911 | do | do | Southern Pacific Ry. bridge, 2 miles south of Montague. | 111 |
| Aug. 29, 1905 | Canal, Yreka Light & Power Co.'s. | | 5 miles northeast of Yreka. | 107 |
| June 8, 1904 | Shasta River, Little | Shasta River | Table Rock, Cal. | 117 |
| Aug. 29, 1905 | do | do | Little Shasta, Cal. | 3.8 |
| Aug. 21, 1911 | do | do | 1½ miles northeast of Little Shasta. | 7.2 |
| Aug. 29, 1905 | Shasta Springs, Little | do | Little Shasta | 20 |
| May 28, 1912 | Yreka Creek | do | Minor Street Bridge in Yreka. | 5.6 |
| Sept. 3, 1905 | Ditch, Edson Foulk's | | In Shasta Valley | 11 |
| Sept. 3, 1911 | Ditch, Siskiyou Electric Co.'s. | Diverts from Shasta River. | 4 miles north of Yreka | 107 |
| Aug. 29, 1905 | Scott River | Klamath River | 1 mile west of Fort Jones | 27 |
| Oct. 12, 1910 | do | do | Below wagon bridge, 1 mile below Callahan. | 21 |
| Nov. 22, 1910 | do | do | do | 63 |
| Apr. 10, 1911 | do | do | do | 372 |
| May 30, 1911 | do | do | do | 575 |
| Sept. 20, 1911 | do | do | do | 17 |
| Jan. 23, 1912 | do | do | do | 43 |
| Nov. 1, 1911 | do | do | 3 miles north of Callahan | 14 |
| Aug. 30, 1911 | do | do | 7 miles west of Fort Jones. | 40 |
| Sept. 8, 1911 | Indian Creek | do | Bridge at Happy Camp, sec. 11, T. 16 N., R. 7 E. | 52 |
| Aug. 26, 1905 | Trinity River | do | 3 miles below Lewiston | 233 |
| Aug. 24, 1910 | do | do | 50 feet above junction with South Fork. | 275 |
| Aug. 22, 1910 | do | do | ¼ mile below ferry at Hoopa. | 345 |
| Aug. 24, 1911 | do | do | ½ mile above junction with North Fork, near Helena. | 230 |
| Aug. 21, 1911 | Stewarts Fork of Trinity River. | Trinity River | ¼ mile above mouth, about 1½ miles south of Minersville. | 32 |
| Sept. 30, 1911 | do | do | do | 33 |
| Sept. 29, 1911 | Canyon Creek | do | 600 feet above highway bridge, about 1½ miles north of Junction City, sec. 36, T. 34 N., R. 11 W. | 6.8 |
| Sept. 30, 1911 | Canyon Creek ditch | Canyon Creek | Intake 500 feet above highway bridge, about 1½ miles north of Junction City. | 4.6 |
| Aug. 23, 1910 | South Fork of Trinity River. | Trinity River | 50 feet below suspension bridge, near mouth. | 74 |
| Aug. 25, 1911 | Hay Fork of Trinity River. | South Fork of Trinity River. | Below junction with Salt Creek, sec. 10, T. 31 N., R. 12 W. | 3.4 |
| Do | Salt Creek | Hay Fork of Trinity River. | Mouth | .5 |
| Aug. 24, 1910 | Willow Creek | Trinity River | Near mouth at China Flat. | [a] 1.7 |
| Oct. 7, 1911 | do | do | Near mouth at China Flat, sec. 29, T. 7 N., R. 5 E. | 7.3 |
| Dec. 30, 1911 | do | do | do | 36 |
| Apr. 14, 1912 | do | do | do | 90 |
| June 11, 1912 | do | do | do | 65 |
| Aug. 24, 1910 | Campbell Creek | do | Near mouth, near south boundary Hoopa Indian Reservation. | 1 |
| Oct. 9, 1911 | do | do | do | [a] 2 |
| Dec. 30, 1911 | do | do | do | [a] .5 |
| Apr. 19, 1912 | do | do | do | [a] 5 |
| June 13, 1912 | do | do | do | 12 |
| Oct. 9, 1912 | Hospital Creek | do | Mouth, near Hoopa | Dry. |
| Dec. 30, 1912 | do | do | do | [a] 3 |
| Apr. 19, 1912 | do | do | do | [a] 2 |
| Aug. 24, 1910 | Supply Creek | do | Bridge, near Hoopa | 2 |
| Oct. 9, 1911 | do | do | do | 3.7 |

[a] Estimated.

[illegible]

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

*Miscellaneous measurements in Upper Klamath Lake drainage basin*—Continued.

| Date. | Stream. | Tributary to— | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Nov. 8, 1909 | Crooked River | Wood River | Below mouth of Tecumseh Creek. | 53 |
| Aug. 10, 1910 | do | do | | 110 |
| Aug. 31, 1906 | Spring Creek | Crooked River | 1 mile from Klamath Agency. | 27 |
| Aug. 7, 1907 | Tecumseh Creek | do | ½ mile north of Klamath Agency. | 20 |
| Apr. 28, 1908 | do | do | do | 23 |
| May 15, 1908 | do | do | do | 25 |
| July 16, 1908 | do | do | do | 28 |
| Sept. 25, 1908 | do | do | do | 29 |
| Oct. 17, 1908 | do | do | do | 30 |
| Oct. 2, 1909 | do | do | Klamath Agency | 32 |
| Aug. 7, 1907 | Beetles Rest Springs | Tecumseh Creek | ½ mile north of Klamath Agency. | 25 |
| Mar. 23, 1908 | do | do | do | 28 |
| Apr. 27, 1908 | do | do | do | 25 |
| Oct. 1, 1909 | do | do | | 24 |
| May 25, 1905 | Sevenmile Creek | Upper Klamath Lake | On road between Fort Klamath and Pelican Bay. | 102 |
| Sept. 1, 1906 | do | do | do | 83 |
| Aug. 6, 1907 | do | do | do | 94 |
| Oct. 19, 1908 | do | do | do | 57 |
| Oct. 3, 1909 | do | do | do | 83 |
| Aug. 10, 1910 | do | do | do | 82 |
| Aug. 5, 1911 | do | do | do | 100 |
| May 25, 1905 | Crane Creek | Sevenmile Creek | do | 10.7 |
| Aug. 6, 1907 | do | do | do | 11 |
| Aug. 5, 1911 | do | do | do | 10.4 |
| Oct. 3, 1909 | Unnamed Creek | do | do | 9.7 |
| May 25, 1905 | Threemile Creek | Upper Klamath Lake | do | 6.2 |
| Aug. 5, 1907 | do | do | do | [a] 2 |
| May 25, 1905 | Cherry Creek | do | do | 32 |
| Sept. 1, 1906 | do | do | do | 9.4 |
| Aug. 5, 1907 | do | do | do | 19 |
| Oct. 3, 1909 | do | do | do | 5.8 |
| Aug. 10, 1910 | do | do | do | 10 |
| Aug. 3, 1907 | Jones Creek | do | do | 7.7 |
| Oct. 3, 1909 | do | do | do | 1.9 |
| Sept. 24, 1910 | do | do | do | 2.5 |
| May 23, 1905 | Moss Creek | do | On road from Klamath Falls to Pelican Bay. | 2.5 |
| Aug. 3, 1907 | do | do | do | [a] 1 |
| Oct. 4, 1909 | do | do | do | 6.1 |
| May 23, 1905 | Rock Creek | do | Near Aspin Lake | 9.6 |
| May 24, 1905 | do | Crystal Creek | Crystal, Oreg | 5.9 |
| Sept. 3, 1906 | do | Upper Klamath Lake | 7 miles below Odessa | 12.8 |
| Aug. 3, 1907 | do | do | Sec. 9, T. 37 S., R. 7 E | 6.8 |
| Aug. 11, 1910 | do | do | 5 miles southeast of Odessa, Oreg. | 13 |
| Sept. 24, 1910 | do | do | Pelican Bay | 7.3 |
| Aug. 5, 1911 | do | do | do | 8.4 |
| May 24, 1905 | Fourmile Creek | do | At road crossing between Klamath Falls and Pelican Bay. | 53 |
| May 15, 1909 | do | do | Fourmile Lake | 40 |
| June 18, 1909 | do | do | do | 63 |
| Aug. 14, 1909 | do | do | do | 2 |
| May 20, 1910 | do | do | do | 60 |
| June 17, 1910 | do | do | do | 5 |
| Aug. 4, 1907 | do | do | Sec. 4, T. 36 S., R. 5 E | 2.3 |
| May 24, 1905 | Varney Creek | Fourmile Creek | | 9.1 |
| May 8, 1910 | Barclay Springs | Upper Klamath Lake | | 1.7 |
| May 10, 1910 | Cream Creek | do | | 12.3 |
| May 25, 1904 | Williamson River | do | Near junction with Sprague River. | 2,091 |
| May 27, 1905 | do | do | do | 1,371 |
| Aug. 22, 1905 | do | do | do | 858 |
| Aug. 29, 1906 | do | do | do | 880 |
| Apr. 29, 1908 | do | do | do | 2,000 |
| Nov. 14, 1905 | do | do | Above junction with Sprague River. | 625 |
| Aug. 7, 1907 | do | do | do | 513 |
| Oct. 7, 1907 | do | do | do | 507 |
| Oct. 20, 1908 | do | do | do | 692 |
| Aug. 8, 1907 | do | do | 4 miles above mouth | 985 |
| Oct. 5, 1907 | do | do | do | 960 |
| June 21, 1912 | do | do | Sec. 17, T. 30 S., R. 10 E | 125 |
| June 22, 1912 | do | do | Sec. 4, T. 4 S., R. 11 E | 14.5 |

[a] Estimated.

[illegible]—continued.

*Miscellaneous measurements in Lower Klamath Lake drainage basin.*

| Date. | Stream. | Tributary to— | Locality. | Gage height. | Discharge. |
|---|---|---|---|---|---|
| | | | | *Feet.* | *Sec.-ft.* |
| [illegible] 1904 | Antelope Creek | Lower Klamath Lake | [illegible] | | a 15 |
| [illegible] 1905 | do | do | [illegible] miles below source | | [illegible] |
| [illegible] 1905 | do | do | 5 miles below source | | [illegible] 4 |
| [illegible] 1904 | [illegible] Creek | do | ¾ mile above Wm. Brac[illegible] home, Cal. | | 148 |
| [illegible] 1904 | do | do | [illegible] mi. above Brown ranch, Cal. | | 194 |
| May [illegible] 1905 | do | do | do | | 68 |
| [illegible] 1905 | do | do | do | | [illegible] |
| [illegible] 1905 | do | do | do | | 5[illegible] |
| [illegible] 1905 | do | do | do | | 1[illegible].4 |
| [illegible] 1905 | do | do | do | | [illegible] 1 |
| [illegible] 1904 | Adams ditch | do | Near Merrill, Oreg. | | 2[illegible] |
| May [illegible] 1905 | do | do | do | | 4[illegible] |
| May [illegible] 1905 | do | do | do | | 5[illegible] |
| [illegible] 1905 | do | do | do | | 5 |
| [illegible] 1905 | do | do | do | | 5[illegible] |
| Aug. [illegible] 1905 | do | do | do | | 5 |
| Aug. [illegible] 1905 | do | do | do | | 2[illegible] |
| Do | do | do | do | | 4[illegible] |
| June [illegible] 1905 | Cottonwood Creek | do | Near Brownell, Cal. ([illegible] ranch). | | 1[illegible] 2 |
| Aug. 30, 1905 | do | do | do | | 1[illegible] 6 |
| [illegible] 1906 | do | do | do | | 14 |
| Sept. [illegible] 1906 | do | | do | | [illegible] 2 |
| Aug. 21, 1907 | do | Lower Klamath Lake | Sec. 1[illegible], T. 47 N., R. [illegible] E., Cal. | | 15 |
| May [illegible] 1908 | do | do | Near [illegible] ranch, Cal. | | 1[illegible] |
| [illegible] 1908 | do | do | do | | 2[illegible] |
| Nov. [illegible] 1908 | do | do | do | | 14 |
| June [illegible] 1909 | do | do | do | | 2[illegible] 1 |
| June 30, 1909 | do | do | do | | 1[illegible] 9 |
| Sept. [illegible] 1909 | do | do | do | | 15 3 |
| [illegible] 2[illegible], 1911 | do | do | do | | 2 |
| Sept. 20, 1911 | do | do | do | | [illegible] |
| June [illegible] 1905 | Doris Creek | do | Doris ranch, Cal. | | 6 1 |
| Feb. [illegible] 1906 | do | do | do | | [illegible] |
| Mar. 2[illegible] 1906 | do | do | do | | 11 6 |
| Sept. 2[illegible] 1906 | do | do | do | | [illegible] 4 |
| May 6, 1908 | do | do | do | | [illegible] |
| [illegible] 2, 1908 | do | do | do | | [illegible] |
| Nov. 6, 1908 | do | do | do | | [illegible] |
| June [illegible] 1909 | do | do | [illegible] miles east of Doris | | 4 [illegible] |
| June 29, 1909 | do | do | do | | 6 1 |
| Nov. 28, 1906 | Ford Spring | Willow Creek | Near Brownell, Cal. | | 2 |
| Aug. 16, 1905 | Hot Spring Creek | Lower Klamath Lake | Near Klamath Falls, Oreg. | | 4.4 |
| Sept. 15, 1909 | Klamath Straits | do | Near Ady, Oreg. | | 68 |
| Oct. 2, 1909 | do | do | do | | 359 |
| May 15, 1905 | Sheepy Creek | do | 2 miles east of Doris ranch. | | 27 |
| June 15, 1905 | do | do | do | | 27 |
| May 7, 1908 | do | do | Near mouth, Doris, Cal. | | 32 |
| July 4, 1908 | do | do | do | | 34 |
| Nov. 9, 1908 | do | do | do | | 40 |
| Sept. 15, 1909 | do | do | do | | 30 |
| Sept. 20, 1910 | do | do | Lower marsh | | 35 |
| Aug. 20, 1907 | Slow Creek | do | Sec. 11, T. 47 N., R. 1 E. | | 12 |
| May 14, 1905 | Van Brimmer ditch, north branch. | do | 1 mile below heading | 1.98 | 6 |
| May 21, 1905 | do | do | do | 1.99 | 6.2 |
| June 15, 1905 | do | do | do | 2.21 | 7.6 |
| July 24, 1905 | do | do | do | 2.34 | 9.7 |
| Do | do | do | do | 2.34 | 9.5 |
| Aug. 24, 1905 | do | do | do | 2.20 | 4.6 |
| May 14, 1905 | Van Brimmer ditch, south branch. | do | do | 4.01 | 24 |
| May 21, 1905 | do | do | do | 3.78 | 21 |
| June 14, 1905 | do | do | do | 3.92 | 20 |
| July 22, 1905 | do | do | do | 3.84 | 11.5 |
| Aug. 24, 1905 | do | do | do | 3.72 | 7.5 |
| Do | do | do | do | 3.85 | 9.9 |
| Aug. 25, 1905 | do | do | do | 4.12 | 10.3 |
| Do | do | do | do | 3.40 | 2.6 |
| Do | do | do | do | 3.55 | 4.3 |
| May 20, 1905 | Willow Creek | do | Near Brownell | | 12.3 |
| June 15, 1905 | do | do | do | | 11.5 |
| Aug. 30, 1905 | do | do | do | | 9.7 |
| Nov. 23, 1906 | do | do | do | | 11 |

a Estimated.

*Miscellaneous measurements in Lower Klamath Lake drainage basin*—Continued.

| Date | Stream | Tributary to— | Locality | [illegible] | [illegible] |
|---|---|---|---|---|---|
| Feb. 15, 190[illegible] | Willow Creek | Lower Klamath Lake | [illegible] | [illegible] | [illegible] |
| Mar. [illegible], 190[illegible] | do | do | do | [illegible] | [illegible] |
| Sept. [illegible], 190[illegible] | do | do | do | [illegible] | [illegible] |
| Aug. [illegible], 190[illegible] | do | do | do | [illegible] | [illegible] |
| May [illegible], 190[illegible] | do | do | do | [illegible] | [illegible] |
| July [illegible], 190[illegible] | do | do | do | [illegible] | [illegible] |
| Nov. [illegible], 190[illegible] | do | do | do | [illegible] | [illegible] |
| June [illegible], 190[illegible] | do | do | [illegible] | [illegible] | [illegible] |
| June 30, 190[illegible] | do | do | [illegible] | [illegible] | [illegible] |
| Sept. 1[illegible], 190[illegible] | do | do | do | [illegible] | [illegible] |
| July [illegible], 19[illegible] | do | do | [illegible] | [illegible] | [illegible] |
| Sept. [illegible], 190[illegible] | do | do | do | [illegible] | [illegible] |

*Miscellaneous measurements in [illegible] Lake drainage basin.*

| Date | Stream | Tributary to— | Locality | [illegible] |
|---|---|---|---|---|
| [illegible] | [illegible] | [illegible] River | [illegible] | [illegible] |
| [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] River | [illegible] Lake | [illegible] | [illegible] |
| [illegible] | do | do | do | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | do | do | [illegible] | [illegible] |
| [illegible] | [illegible] River | [illegible] River | [illegible] | [illegible] |
| [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | do | do | [illegible] |
| [illegible] | [illegible] | do | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | do | [illegible] |
| [illegible] | [illegible] | [illegible] | do | [illegible] |
| [illegible] | [illegible] | [illegible] | do | [illegible] |
| [illegible] | [illegible] | [illegible] | do | [illegible] |
| [illegible] | [illegible] | [illegible] | do | [illegible] |
| [illegible] | [illegible] | [illegible] | do | [illegible] |
| [illegible] | [illegible] | [illegible] | do | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | do | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

[illegible]

## [illegible]

[illegible]

miles. Discharge measurements are made from the bridge or by wading.

The gage-height record was furnished by the United States Forest Service.

Estimates of discharge are withheld until additional data are secured.

*Discharge measurements of Middle Fork of Smith River near Crescent City, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 8 | E. O. Christiansen | 4.10 | 70 | Mar. 26 | E. O. Christiansen | 5.83 | 615 |
| Dec. 5 | do | 4.49 | 131 | May 9 | do | 6.32 | 1,200 |
| | | | | May 27 | E. M. Gilbert | 6.00 | 627 |
| 1912. | | | | June 5 | do | 5.34 | 380 |
| Feb. 27 | E. O. Christiansen | 5.95 | 766 | | | | |

*Daily gage height, in feet, of Middle Fork of Smith River near Crescent City, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 4.02 | 4.40 | 5.48 | 6.62 | 5.72 | 5.53 | 11.72 | 5.62 |
| 2 | | | | 4.40 | 5.16 | 6.32 | 5.62 | 5.48 | 8.97 | 5.39 |
| 3 | | 4.10 | | 4.38 | 5.14 | 6.25 | 5.54 | 5.48 | 7.74 | 5.38 |
| 4 | | | 4.00 | 4.35 | 4.96 | 6.35 | 5.49 | 5.38 | 7.22 | 5.31 |
| 5 | | 4.15 | | 4.65 | 4.92 | 6.85 | 5.66 | 5.33 | | 5.28 |
| 6 | | | | 5.28 | 4.96 | 6.60 | 5.92 | 5.33 | 6.50 | 5.12 |
| 7 | | 4.08 | | 5.08 | 8.34 | 6.40 | 6.26 | | 6.40 | 5.10 |
| 8 | 4.10 | | | 4.86 | 7.29 | 6.68 | 6.19 | 5.26 | | 5.06 |
| 9 | 4.10 | 4.45 | | 4.73 | 9.46 | 7.08 | 5.87 | 5.16 | 6.35 | 4.95 |
| 10 | 4.10 | | 5.00 | 4.66 | 10.07 | 7.68 | | 5.26 | 6.00 | 4.90 |
| 11 | 4.10 | | 4.52 | 4.58 | 7.92 | 7.77 | 5.74 | 5.21 | 5.98 | 4.89 |
| 12 | 4.15 | | | 4.54 | 13.22 | 7.34 | 5.74 | 5.21 | 5.75 | 5.10 |
| 13 | 4.25 | 4.42 | | 4.51 | 12.42 | 7.11 | 5.87 | 5.11 | 5.76 | 5.16 |
| 14 | 4.12 | 4.50 | | | 9.00 | 7.66 | 5.77 | | 5.70 | 5.25 |
| 15 | 4.12 | | 8.60 | | | 7.46 | 7.37 | | 5.59 | 5.06 |
| 16 | 4.12 | | | | 7.50 | 13.19 | 7.82 | | 5.35 | 4.82 |
| 17 | 4.10 | | | | 7.08 | 16.39 | 7.62 | | 5.32 | 4.76 |
| 18 | | | | | 6.68 | 11.69 | 7.12 | | 5.32 | 4.65 |
| 19 | | | | | 6.58 | 9.46 | 6.80 | | 5.35 | 4.70 |
| 20 | | | | | 6.38 | 8.20 | 6.38 | | 5.70 | 4.82 |
| 21 | | | | | 6.16 | 7.54 | 6.10 | | 5.70 | 4.89 |
| 22 | | | | 4.90 | 6.01 | 7.14 | 6.00 | | 5.55 | 4.80 |
| 23 | | 4.05 | | 5.27 | 5.96 | 6.90 | 6.05 | | 5.42 | 4.84 |
| 24 | | | | 5.10 | 6.46 | 6.49 | | | 5.42 | 4.79 |
| 25 | 4.08 | 4.05 | | | 12.76 | 6.25 | 5.90 | | 5.52 | 4.64 |
| 26 | 4.15 | | | 4.95 | 12.14 | 6.18 | 5.82 | 5.54 | 5.58 | 4.68 |
| 27 | 4.10 | | | 5.52 | 9.64 | 6.00 | 5.78 | 5.42 | 6.12 | 4.69 |
| 28 | 4.10 | 4.05 | | | | 5.86 | 5.73 | | 5.80 | 4.64 |
| 29 | 4.08 | | | | 7.79 | 5.79 | 5.83 | 7.38 | 5.88 | 4.54 |
| 30 | 4.05 | | 4.42 | | 7.42 | | 5.70 | 8.62 | 5.85 | 4.56 |
| 31 | | | | | | | | | 5.60 | |

### NORTH FORK OF SMITH RIVER NEAR CRESCENT CITY, CAL.

This station, which is located half a mile northeast of Gasquet, in the NE. ¼ sec. 20, T. 17 N., R. 2 E., half a mile above the junction of North and Middle forks and about 15 miles northeast of Crescent City, was established September 8, 1911.

The gage is a staff, in four sections, on the left bank, installed December 3, 1911. The original gage, which was destroyed by high water on November 15, was located one-eighth mile below the present gage. The original datum has not been maintained.

The channel is composed of bowlders and gravel and is very rough and probably permanent. The area drained is 81 square miles. Discharge measurements are made from a car and cable at the gage.

The gage-height record is furnished by the United States Forest Service.

Estimates of discharge are withheld until additional data are secured

*Discharge measurements of North Fork of Smith River near Crescent City, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 8 | E. O. Christiansen | 3.60 | 73 | Mar. 26 | E. O. Christiansen | 11.74 | 824 |
| Dec. 6 | .....do | [a]12.82 | 1,440 | May 9 | .....do | 11.64 | 845 |
| 1912. | | | | 27 | E. M. Gilbert | 12.55 | 1,300 |
| Feb. 27 | E. O. Christiansen | 11.77 | 907 | June 5 | .....do | 10.76 | 457 |

[a] New gage installed at arbitrary datum Dec. 3, 1911.

*Daily gage height, in feet, of North Fork of Smith River near Crescent City, Cal., for 1911-12*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 3.50 | | 12.2 | 12.4 | 11.4 | 11.2 | 19.2 | 11.3 |
| 2 | | | | | 11.8 | 12.1 | 11.2 | 11.2 | 16.0 | 11.1 |
| 3 | | 3.60 | | 8.90 | 11.5 | 11.9 | 11.2 | 11.1 | 14.3 | 11.0 |
| 4 | | | 3.45 | 8.80 | 11.4 | 12.4 | 11.1 | 11.0 | 13.4 | 10.8 |
| 5 | | 3.62 | | 9.00 | 11.4 | 14.0 | 11.2 | 10.9 | | 10.8 |
| 6 | | | | 12.90 | 11.6 | 12.9 | 11.8 | 10.8 | 12.4 | 10.6 |
| 7 | | 3.52 | | 12.00 | 16.9 | 12.7 | 12.1 | | | 10.6 |
| 8 | 3.60 | | | 11.50 | 15.0 | 14.0 | 12.6 | 10.8 | | 10.5 |
| 9 | 3.60 | 4.25 | | 11.20 | 18.3 | 14.6 | 12.2 | 10.7 | 11.6 | 10.5 |
| 10 | 3.60 | | 6.1 | 11.00 | 17.6 | 16.0 | | 10.65 | 11.4 | 10.4 |
| 11 | 3.62 | | 5.1 | 10.88 | 15.1 | 15.1 | 11.7 | 10.65 | 11.3 | 10.3 |
| 12 | 3.69 | | | 10.75 | 22.7 | 14.0 | 11.6 | 10.7 | | 10.8 |
| 13 | 3.75 | 4.30 | | 10.68 | 20.8 | 13.6 | 11.7 | 10.7 | 11.0 | 12.1 |
| 14 | 3.62 | 4.40 | | | 16.0 | 14.0 | 11.6 | | 10.9 | 12.2 |
| 15 | 3.62 | | ([a]) | | | 13.5 | 15.8 | | 10.8 | 11.6 |
| 16 | 3.65 | | | | 13.8 | 20.8 | 15.1 | | 10.7 | 11.2 |
| 17 | 3.58 | | | | 13.1 | 23.8 | 14.2 | | | 11.0 |
| 18 | | | | | 12.6 | 18.4 | 13.8 | | 10.6 | 10.85 |
| 19 | | | | | 12.5 | 15.7 | 13.3 | | | 10.7 |
| 20 | | | | | 12.4 | 14.3 | 12.8 | | 10.85 | 11.8 |
| 21 | | | | | 12.0 | 13.5 | 12.5 | | 11.3 | 10.8 |
| 22 | | | | 11.45 | 11.8 | 12.9 | 12.3 | | 11.1 | 10.8 |
| 23 | | 3.52 | | 12.28 | 11.8 | 12.8 | 12.2 | | 11.0 | 10.8 |
| 24 | | | | 12.00 | 12.2 | 12.5 | | | 10.9 | 10.65 |
| 25 | 3.52 | 3.52 | | | 19.6 | 12.2 | 11.9 | | 10.9 | 10.6 |
| 26 | 3.62 | | | | 19.3 | 12.0 | 11.8 | 12.3 | | 10.5 |
| 27 | 3.68 | | | 12.55 | 16.5 | 11.8 | 11.7 | 12.0 | 12.7 | 10.45 |
| 28 | 3.55 | 3.50 | | | | 11.6 | 11.6 | | 11.9 | 10.35 |
| 29 | 3.52 | | | | 14.2 | 11.5 | 11.6 | 16.0 | 11.9 | 10.25 |
| 30 | 3.52 | | | | 13.4 | | 11.4 | 16.8 | 11.8 | 10.2 |
| 31 | | | | | 12.9 | | | | 11.8 | |

[a] Gage washed out Nov. 15, 1911. New gage installed at arbitrary datum Dec. 3, 1911.

### SOUTH FORK OF SMITH RIVER NEAR CRESCENT CITY, CAL.

This station, which is located just below the highway bridge, in the SW. ¼ NE. ¼ sec. 10, T. 16 N., R. 1 E., one-eighth of a mile above the mouth and 9 miles northeast of Crescent City, was established September 9, 1911.

The gage is a staff, in four sections, on the left bank 200 feet below the bridge. The channel is composed of bowlders and gravel and may shift during high water. The drainage area above the station is 290 square miles. Discharge measurements are made from car and cable 400 feet below gage or by wading.

Estimates of discharge are withheld until additional data is available.

*Discharge measurements of South Fork of Smith River near Crescent City, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 9 | E. O. Christiansen | 5.41 | 154 | Mar. 27 | E. O. Christiansen | 6.93 | 1,630 |
| Dec. 13 | do | 6.21 | 469 | May 10 | do | 7.74 | 2,450 |
| | | | | 25 | E M. Gilbert | 6.90 | 1'600 |
| 1912. | | | | June 2 | do | 6.68 | 1,400 |
| Feb. 28 | E. O. Christiansen | 7.20 | 1,720 | 10 | do | 6.00 | 850 |
| 29[a] | do | 7.03 | 1,520 | 30 | H. E. Green | 5.56 | 665 |

[a] Meter point found broken at end of measurement.

*Daily gage height, in feet, of South Fork of Smith River near Crescent City, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 5.45 | 5.50 | 6.00 | 7.9 | 8.1 | 7.0 | 6.6 | 14.7 | 6.8 |
| 2 | | 5.48 | 5.52 | 5.94 | 7.6 | 7.8 | 6.8 | 6.5 | 11.0 | 6.6 |
| 3 | | 5.45 | 5.58 | 6.00 | 7.6 | 7.9 | 6.6 | 6.45 | 9.4 | 6.6 |
| 4 | | 5.50 | 5.55 | 5.99 | 7.8 | 8.6 | 6.45 | 6.4 | 8.6 | 6.6 |
| 5 | | 5.50 | 5.54 | 6.10 | 7.6 | 9.0 | 6.3 | 6.4 | 8.2 | 6.45 |
| 6 | | 5.60 | 5.54 | 7.40 | 8.0 | 8.8 | 6.7 | 6.5 | 8.2 | 6.4 |
| 7 | | 5.61 | 5.51 | 7.20 | 8.2 | 8.4 | 7.2 | 6.5 | 8.0 | 6.4 |
| 8 | | 5.55 | 5.49 | 6.65 | 9.0 | 9.7 | 7.4 | 6.45 | 8.1 | 6.35 |
| 9 | 5.40 | 5.52 | 5.48 | 6.56 | 13.8 | 9.7 | 7.7 | 6.4 | 8.0 | 6.2 |
| 10 | 5.41 | 6.49 | 5.44 | 6.41 | 13.4 | 9.3 | 7.1 | 6.4 | 7.8 | 5.95 |
| 11 | 5.42 | 5.50 | 5.41 | 6.25 | 13.6 | 9.3 | 6.9 | 6.4 | 7.6 | 5.95 |
| 12 | 5.45 | 5.51 | 5.40 | 6.20 | 20.9 | 9.5 | 6.6 | 6.3 | 7.4 | 6.2 |
| 13 | 5.50 | 5.59 | 5.30 | 6.15 | 21.2 | 9.0 | 8.4 | 6.3 | 7.4 | 6.55 |
| 14 | 5.50 | 5.69 | 5.34 | 6.21 | 18.2 | 9.3 | 9.2 | 6.25 | 7.2 | 6.65 |
| 15 | 5.50 | 5.76 | 5.40 | 6.28 | 13.4 | 10.6 | 9.8 | 6.2 | 7.2 | 6.4 |
| 16 | 5.40 | 5.74 | 5.42 | 6.66 | 9.0 | 15.6 | 11.1 | 6.15 | 6.8 | 6.25 |
| 17 | 5.30 | 6.40 | 5.64 | 6.89 | 9.2 | 26.4 | 9.8 | 6.1 | 6.6 | 6.2 |
| 18 | 5.40 | 6.30 | 6.85 | 6.84 | 8.8 | 21.8 | 8.8 | 6.1 | 6.6 | 6.05 |
| 19 | 5.41 | 6.25 | 7.38 | 6.96 | 8.4 | 13.6 | 8.0 | 6.05 | 6.6 | 5.9 |
| 20 | 5.42 | 6.20 | 7.35 | 7.00 | 8.1 | 10.5 | 7.4 | 6.0 | 7.2 | 5.95 |
| 21 | 5.42 | 5.72 | 7.41 | 6.98 | 8.2 | 9.0 | 7.3 | 6.1 | 7.0 | 5.95 |
| 22 | 5.40 | 5.71 | 7.40 | 7.00 | 8.1 | 8.5 | 7.2 | 6.15 | 6.8 | 5.9 |
| 23 | 5.40 | 5.72 | 7.30 | 7.22 | 8.2 | 8.3 | 7.1 | 6.2 | 6.6 | 5.9 |
| 24 | 5.45 | 5.70 | 7.20 | 7.26 | 9.8 | 8.0 | 7.0 | 6.7 | 6.8 | 5.8 |
| 25 | 5.44 | 5.65 | 9.55 | 7.40 | 16.2 | 7.7 | 7.0 | 7.0 | 6.9 | 5.85 |
| 26 | 5.42 | 5.62 | 7.20 | 7.59 | 18.4 | 7.4 | 6.9 | 7.0 | 7.4 | 5.7 |
| 27 | 5.40 | 5.60 | 6.95 | 7.66 | 13.8 | 7.3 | 6.8 | 6.8 | 7.8 | 5.7 |
| 28 | 5.42 | 5.50 | 6.82 | 7.99 | 9.4 | 7.2 | 6.8 | 7.0 | 7.3 | 5.7 |
| 29 | 5.44 | 5.55 | 6.70 | 7.31 | 8.9 | 7.0 | 6.8 | 10.2 | 7.3 | 5.6 |
| 30 | 5.48 | 5.51 | 6.58 | 8.18 | 8.8 | | 6.7 | 12.8 | 7.1 | 5.55 |
| 31 | | 5.50 | | 7.95 | 8.4 | | 6.6 | | 6.8 | |

*Miscellaneous measurements in Lower Klamath Lake drainage basin*—Continued.

| Date. | Stream. | Tributary to— | Locality. | Gage height. | Discharge. |
|---|---|---|---|---|---|
| | | | | *Feet.* | *Sec.-ft.* |
| Feb. 13, 1908 | Willow Creek | Lower Klamath Lake | Near Brownell | | [illegible] |
| Mar. 24, 1908 | do | do | do | | [illegible] |
| Sept. 26, 1908 | do | do | do | | 13 |
| Aug. 20, 1907 | do | do | do | | [illegible] |
| May 6, 1908 | do | do | do | | [illegible] |
| July 3, 1908 | do | do | do | | [illegible] |
| Nov. 8, 1908 | do | do | do | | 13 |
| June 3, 1908 | do | do | Near Davis ranch, Cal. | | [illegible] |
| June 30, 1909 | do | do | Road from Doris, Cal., to Merrill, Oreg. | | [illegible] |
| Sept. 16, 1909 | do | do | do | | [illegible] |
| July 26, 1910 | do | do | Near Davis School | | [illegible] |
| Sept. 21, 1909 | do | do | do | | [illegible] |

*Miscellaneous measurements in Tule Lake drainage basin.*

| Date. | Stream. | Tributary to— | Locality. | Discharge |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| July 19, 1905 | Boards ditch | Lost River | Near Olene, Oreg. | [illegible] |
| May 31, 1905 | Browne's west canal | do | Near Bonanza, Oreg. | [illegible] |
| June 2, 1905 | Griffith canal | do | Near Olene, Oreg. | 1.5 |
| June 13, 1905 | do | do | do | 1.9 |
| June 25, 1906 | do | do | do | 1.3 |
| June 23, 1905 | Horton ditch | do | Poe Valley, Oreg. | 4.4 |
| May 23, 1904 | Lost River | Tule Lake | Olene, Oreg. | 951 |
| June 10, 1904 | do | do | do | [illegible] |
| May 19, 1904 | do | do | Langells Valley, Oreg. | 746 |
| Mar. 17, 1908 | do | do | 10 miles above Merrill, Oreg. | 1,300 |
| Oct. 22, 1909 | do | do | 4 miles west of Bonanza, Oreg. | 95 |
| Nov. 22, 1909 | do | do | Upper end of Langells Valley, Oreg. | 658 |
| May 13, 1907 | Lost River, East Fork | Lost River | Sec. 3, T. 48 N., R. 7 E., Cal. | 2 |
| May 20, 1904 | Miller Creek | do | Near Lorella, Oreg. | 126 |
| May 16, 1908 | Olene Springs | do | Near Olene, Oreg. | 2.9 |
| Mar. 28, 1911 | Buck Creek | do | Yonna | 41 |
| June 13, 1905 | Phillip's wheel canal | do | 9 miles above Merrill, Oreg. | 1.2 |
| July 25, 1905 | do | do | do | .2 |
| Mar. 28, 1911 | Surface water | do | Clear Lake | 144 |
| Apr. 13, 1908 | Tule Lake outlet[a] | | Near Scorpion Point, Cal. | 14.4 |
| Apr. 23, 1908 | do | | do | 14.4 |
| May 3, 1908 | do | | do | 14.4 |
| May 12, 1908 | do | | do | 14.2 |
| June 10, 1908 | do | | do | 11.9 |
| June 26, 1908 | do | | do | 12.5 |
| July 10, 1908 | do | | do | 14.4 |
| Dec. 7, 1908 | do | | do | 33 |
| Dec. 23, 1908 | do | | do | 29 |
| Mar. 16, 1909 | do | | Scorpion Point, Cal. | 30 |
| Sept. 17, 1909 | do | | do | 30 |
| June 2, 1905 | Swingle flume canal | Miller Creek | Near Lorella, Oreg. | .2 |

[a] This is an artificial outlet constructed by the United States Reclamation Service.

## SMITH RIVER BASIN.

### MIDDLE FORK OF SMITH RIVER NEAR CRESCENT CITY, CAL.

This station, which is located at a highway bridge in the S. ½ sec. 20, T. 17 N., R. 2 E., 800 feet above the junction of North and Middle Forks, one-eighth of a mile east of Gasquet, and 14 miles northeast of Crescent City, was established September 8, 1911.

There is a chain gage attached to the downstream guard rail of bridge. The channel is rough and composed of bowlders and gravel. The section is probably permanent. The area drained is 146 square

miles. Discharge measurements are made from the bridge or by wading.

The gage-height record was furnished by the United States Forest Service.

Estimates of discharge are withheld until additional data are secured.

*Discharge measurements of Middle Fork of Smith River near Crescent City, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 8 | E. O. Christiansen | 4.10 | 70 | Mar. 26 | E. O. Christiansen | 5.83 | 615 |
| Dec. 5 | .....do | 4.49 | 131 | May 9 | .....do | 6.32 | 1,200 |
| 1912. | | | | May 27 | E. M. Gilbert | 6.00 | 627 |
| Feb. 27 | E. O. Christiansen | 5.95 | 766 | June 5 | .....do | 5.34 | 380 |

*Daily gage height, in feet, of Middle Fork of Smith River near Crescent City, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 4.02 | 4.40 | 5.48 | 6.62 | 5.72 | 5.53 | 11.72 | 5.62 |
| 2 | | | | 4.40 | 5.16 | 6.32 | 5.62 | 5.48 | 8.97 | 5.39 |
| 3 | | 4.10 | | 4.38 | 5.14 | 6.25 | 5.54 | 5.48 | 7.74 | 5.38 |
| 4 | | | 4.00 | 4.35 | 4.96 | 6.35 | 5.49 | 5.38 | 7.22 | 5.31 |
| 5 | | 4.15 | | 4.65 | 4.92 | 6.85 | 5.66 | 5.33 | | 5.28 |
| 6 | | | | 5.28 | 4.96 | 6.60 | 5.92 | 5.33 | 6.50 | 5.12 |
| 7 | | 4.08 | | 5.08 | 8.34 | 6.40 | 6.26 | | 6.40 | 5.10 |
| 8 | 4.10 | | | 4.86 | 7.29 | 6.68 | 6.19 | 5.26 | | 5.08 |
| 9 | 4.10 | 4.45 | | 4.73 | 9.46 | 7.08 | 5.87 | 5.16 | 6.35 | 4.95 |
| 10 | 4.10 | | 5.00 | 4.66 | 10.07 | 7.68 | | 5.26 | 6.00 | 4.90 |
| 11 | 4.10 | | 4.52 | 4.58 | 7.92 | 7.77 | 5.74 | 5.21 | 5.98 | 4.89 |
| 12 | 4.15 | | | 4.54 | 13.22 | 7.34 | 5.74 | 5.21 | 5.75 | 5.10 |
| 13 | 4.25 | 4.42 | | 4.51 | 12.42 | 7.11 | 5.87 | 5.11 | 5.76 | 5.16 |
| 14 | 4.12 | 4.50 | | | 9.00 | 7.66 | 5.77 | | 5.70 | 5.25 |
| 15 | 4.12 | | 8.60 | | | 7.46 | 7.37 | | 5.59 | 5.05 |
| 16 | 4.12 | | | | 7.50 | 13.19 | 7.82 | | 5.35 | 4.82 |
| 17 | 4.10 | | | | 7.08 | 16.39 | 7.62 | | 5.32 | 4.76 |
| 18 | | | | | 6.68 | 11.69 | 7.12 | | 5.32 | 4.65 |
| 19 | | | | | 6.58 | 9.46 | 6.80 | | 5.35 | 4.70 |
| 20 | | | | | 6.38 | 8.20 | 6.38 | | 5.70 | 4.82 |
| 21 | | | | | 6.16 | 7.54 | 6.10 | | 5.70 | 4.89 |
| 22 | | | | 4.90 | 6.01 | 7.14 | 6.00 | | 5.55 | 4.80 |
| 23 | | 4.05 | | 5.27 | 5.96 | 6.90 | 6.05 | | 5.42 | 4.84 |
| 24 | | | | 5.10 | 6.46 | 6.49 | | | 5.42 | 4.79 |
| 25 | 4.08 | 4.05 | | | 12.76 | 6.25 | 5.90 | | 5.52 | 4.64 |
| 26 | 4.15 | | | 4.95 | 12.14 | 6.18 | 5.82 | 5.54 | 5.58 | 4.68 |
| 27 | 4.10 | | | 5.52 | 9.64 | 6.00 | 5.78 | 5.42 | 6.12 | 4.69 |
| 28 | 4.10 | 4.05 | | | | 5.86 | 5.73 | | 5.80 | 4.64 |
| 29 | 4.08 | | | | 7.79 | 5.79 | 5.83 | 7.38 | 5.88 | 4.54 |
| 30 | 4.05 | | 4.42 | | 7.42 | | 5.70 | 8.62 | 5.85 | 4.56 |
| 31 | | | | | | | | | 5.60 | |

## NORTH FORK OF SMITH RIVER NEAR CRESCENT CITY, CAL.

This station, which is located half a mile northeast of Gasquet, in the NE. ¼ sec. 20, T. 17 N., R. 2 E., half a mile above the junction of North and Middle forks and about 15 miles northeast of Crescent City, was established September 8, 1911.

*Miscellaneous measurements in Klamath River drainage basin—Continued.*

| Date. | Stream. | Tributary to— | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Dec. 30, 1911 | Supply Creek | Trinity River | 1,200 feet above mouth, near Hoopa. | 25 |
| Feb. 11, 1912 | do | do | do | 32 |
| Apr. 18, 1912 | do | do | do | [illegible] |
| June 5, 1912 | do | do | do | 25 |
| Aug. 20, 1912 | Trinity Land & Cattle Co.'s ditch. | Diverts from East Fork of Trinity River. | About 3 miles southeast of Trinity Center. | 11 |
| July 28, 1912 | do | do | do | 5.8 |
| Dec. 17, 1910 | Trinity Gold Mine & Reduction Co.'s flume. | Diverts from Coffee Creek. | Near Carrville | 34 |
| Dec. 14, 1911 | Prairie Creek | Hunter Creek | ½ mile northeast of Requa | a 5 |
| Feb. 26, 1912 | do | do | do | a 8 |
| June 12, 1912 | Madden Creek | South Fork of Trinity River. | Near mouth, near China Flat. | 67 |
| June 13, 1912 | Mill Creek | Trinity River | Above ford, near Hoopa | 9.9 |

a Estimated.

*Miscellaneous measurements in Upper Klamath Lake drainage basin.*

| Date. | Stream. | Tributary to— | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| May 28, 1904 | Wood River | Upper Klamath Lake | Fort Klamath | 458 |
| May 27, 1905 | do | do | 4 miles below Fort Klamath. | 459 |
| Aug. 22, 1905 | do | do | Fort Klamath, Oreg | [illegible] |
| Nov. 14, 1905 | do | do | do | [illegible] |
| Dec. 10, 1905 | do | do | do | 274 |
| Aug. 30, 1906 | do | do | do | 287 |
| Do | do | do | 4 miles below Fort Klamath. | 462 |
| Aug. 6, 1907 | do | do | Fort Klamath | [illegible] |
| Aug. 24, 1907 | do | do | do | 301 |
| Sept. 26, 1907 | do | do | do | [illegible] |
| Oct. 6, 1907 | do | do | do | [illegible] |
| Mar. 3, 1908 | do | do | do | 319 |
| Apr. 28, 1908 | do | do | do | 320 |
| May 16, 1908 | do | do | do | 324 |
| July 26, 1908 | do | do | do | 327 |
| Sept. 25, 1908 | do | do | do | 279 |
| Oct. 18, 1908 | do | do | do | [illegible] |
| Oct. 2, 1909 | do | do | do | 282 |
| Aug. 10, 1910 | do | do | do | [illegible] |
| Aug. 7, 1907 | Anna Creek | Wood River | Sec. 16, T. 32 S., R. 7 E. | 62 |
| May 15, 1908 | do | do | do | 62 |
| Sept. 30, 1908 | do | do | 4 miles below Aranta | 45 |
| Do. | Anna Creek Spring | Anna Creek | Aranta | 2.7 |
| Aug. 10, 1910 | Cream Creek | Upper Klamath Lake | Near Sevenmile Creek | 12.3 |
| Aug. 31, 1906 | Fort Creek | Wood River | 2 miles southeast of Fort Klamath. | 115 |
| Aug. 5, 1907 | do | do | Sec. 27, T. 32 S., R. 6 E. | 94 |
| Apr. 28, 1908 | do | do | 2 miles southeast of Fort Klamath. | 113 |
| July 26, 1908 | do | do | do | 95 |
| Sept. 25, 1908 | do | do | do | 94 |
| Oct. 18, 1908 | do | do | do | 95 |
| Oct. 2, 1909 | do | do | do | 95 |
| Aug. [illegible], 1910 | do | do | do | [illegible] |
| Aug. [illegible], 1911 | do | do | do | [illegible] |
| May 27, 1905 | Crooked River | do | 1½ miles from Klamath Agency. | 45 |
| Aug. 31, 1906 | do | do | do | 39 |
| Aug. 7, 1907 | do | do | do | 42 |
| Apr. 28, 1908 | do | do | do | 52 |
| May [illegible], 1908 | do | do | do | 52 |
| July [illegible], 1908 | do | do | do | [illegible] |
| Sept. 25, 1908 | do | do | do | 52 |
| Oct. [illegible], 1908 | do | do | do | 53 |
| Aug. [illegible], 1911 | do | do | do | [illegible] |
| Oct. 2, 1909 | do | do | Above mouth of [illegible] Creek. | 45 |
| Do | do | do | Below mouth of [illegible] Creek. | [illegible] |

*Miscellaneous measurements in Upper Klamath Lake drainage basin*—Continued.

| Date. | Stream. | Tributary to— | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| Nov. 8,1909 | Crooked River | Wood River | Below mouth of Tecumseh Creek. | 83 |
| Aug. 10,1910 | ....do | ....do | | 110 |
| Aug. 31,1906 | Spring Creek | Crooked River | 1 mile from Klamath Agency. | 27 |
| Aug. 7,1907 | Tecumseh Creek | ....do | ½ mile north of Klamath Agency. | 20 |
| Apr. 28,1908 | ....do | ....do | ....do | 23 |
| May 15,1908 | ....do | ....do | ....do | 25 |
| July 16,1908 | ....do | ....do | ....do | 28 |
| Sept. 25,1908 | ....do | ....do | ....do | 29 |
| Oct. 17,1908 | ....do | ....do | ....do | 30 |
| Oct. 2,1909 | ....do | ....do | Klamath Agency | 32 |
| Aug. 7,1907 | Beetles Rest Springs | Tecumseh Creek | ½ mile north of Klamath Agency. | 25 |
| Mar. 23,1908 | ....do | ....do | ....do | 26 |
| Apr. 27,1908 | ....do | ....do | ....do | 25 |
| Oct. 1,1909 | ....do | ....do | | 24 |
| May 25,1905 | Sevenmile Creek | Upper Klamath Lake | On road between Fort Klamath and Pelican Bay. | 102 |
| Sept. 1,1905 | ....do | ....do | ....do | 83 |
| Aug. 6,1907 | ....do | ....do | ....do | 94 |
| Oct. 19,1908 | ....do | ....do | ....do | 57 |
| Oct. 3,1909 | ....do | ....do | ....do | 83 |
| Aug. 10,1910 | ....do | ....do | ....do | 82 |
| Aug. 5,1911 | ....do | ....do | ....do | 100 |
| May 25,1905 | Crane Creek | Sevenmile Creek | ....do | 10.7 |
| Aug. 6,1907 | ....do | ....do | ....do | 11 |
| Aug. 5,1911 | ....do | ....do | ....do | 10.4 |
| Oct. 3,1909 | Unnamed Creek | ....do | ....do | 9.7 |
| May 25,1905 | Threemile Creek | Upper Klamath Lake | ....do | 6.2 |
| Aug. 5,1907 | ....do | ....do | ....do | [a] 2 |
| May 25,1905 | Cherry Creek | ....do | ....do | 32 |
| Sept. 1,1905 | ....do | ....do | ....do | 9.4 |
| Aug. 5,1907 | ....do | ....do | ....do | 19 |
| Oct. 3,1909 | ....do | ....do | ....do | 5.8 |
| Aug. 10,1910 | ....do | ....do | ....do | 10 |
| Aug. 3,1907 | Jones Creek | ....do | ....do | 7.7 |
| Oct. 3,1909 | ....do | ....do | ....do | 1.9 |
| Sept. 24,1910 | ....do | ....do | ....do | 2.5 |
| May 23,1905 | Moss Creek | ....do | On road from Klamath Falls to Pelican Bay. | 2.5 |
| Aug. 3,1907 | ....do | ....do | ....do | [a] 1 |
| Oct. 4,1909 | ....do | ....do | ....do | 6.1 |
| May 23,1905 | Rock Creek | ....do | Near Aspin Lake | 9.6 |
| May 24,1905 | ....do | Crystal Creek | Crystal, Oreg | 5.9 |
| Sept. 3,1906 | ....do | Upper Klamath Lake | 7 miles below Odessa | 12.8 |
| Aug. 3,1907 | ....do | ....do | Sec. 9, T. 37 S., R. 7 E. | 6.8 |
| Aug. 11,1910 | ....do | ....do | 5 miles southeast of Odessa, Oreg. | 13 |
| Sept. 24,1910 | ....do | ....do | Pelican Bay | 7.3 |
| Aug. 5,1911 | ....do | ....do | ....do | 8.4 |
| May 24,1905 | Fourmile Creek | ....do | At road crossing between Klamath Falls and Pelican Bay. | 53 |
| May 15,1909 | ....do | ....do | Fourmile Lake | 40 |
| June 18,1909 | ....do | ....do | ....do | 63 |
| Aug. 14,1909 | ....do | ....do | ....do | 2 |
| May 20,1910 | ....do | ....do | ....do | 60 |
| June 17,1910 | ....do | ....do | ....do | 5 |
| Aug. 4,1907 | ....do | ....do | Sec. 4, T. 36 S., R. 5 E. | 2.3 |
| May 24,1905 | Varney Creek | Fourmile Creek | | 9.1 |
| May 8,1910 | Barclay Springs | Upper Klamath Lake | | 1.7 |
| May 10,1910 | Cream Creek | ....do | | 12.3 |
| May 25,1904 | Williamson River | ....do | Near junction with Sprague River. | 2,091 |
| May 27,1905 | ....do | ....do | ....do | 1,371 |
| Aug. 22,1905 | ....do | ....do | ....do | 858 |
| Aug. 29,1906 | ....do | ....do | ....do | 880 |
| Apr. 29,1908 | ....do | ....do | ....do | 2,000 |
| Nov. 14,1905 | ....do | ....do | Above junction with Sprague River. | 625 |
| Aug. 7,1907 | ....do | ....do | ....do | 513 |
| Oct. 7,1907 | ....do | ....do | ....do | 507 |
| Oct. 20,1908 | ....do | ....do | ....do | 692 |
| Aug. 8,1907 | ....do | ....do | 4 miles above mouth | 985 |
| Oct. 5,1907 | ....do | ....do | ....do | 960 |
| June 21,1912 | ....do | ....do | Sec. 17, T. 30 S., R. 10 E. | 125 |
| June 22,1912 | ....do | ....do | Sec. 4, T. 4 S., R. 11 E. | 14.5 |

[a] Estimated.

[illegible]

*Miscellaneous measurements in Lower Klamath Lake drainage basin.*

| Date. | Stream. | Tributary to— | Locality. | Gage height. | Discharge. |
|---|---|---|---|---|---|
| | | | | *Feet.* | *Sec.-ft.* |
| June 14, 1904 | Antelope Creek | Lower Klamath Lake. | Head | | [a] 155 |
| June 17, 1905 | do | do | 12 miles below source | | 112 |
| Aug. 28, 1905 | do | do | 15 miles below source | | 10.4 |
| June 13, 1904 | Butte Creek | do | ½ mile above Wm. Bray's house, Cal. | | 148 |
| June 15, 1904 | do | do | 1 mile above Boyce ranch, Cal. | | 124 |
| May 5, 1905 | do | do | do | | 68 |
| May 19, 1905 | do | do | do | | 75 |
| June 16, 1905 | do | do | do | | 52 |
| Aug. 29, 1905 | do | do | do | | 16.4 |
| Nov. 23, 1905 | do | do | do | | 8.1 |
| Oct. 2, 1904 | Adam's ditch | do | Near Merrill, Oreg | | 26 |
| May 14, 1905 | do | do | do | | 46 |
| May 21, 1905 | do | do | do | | 53 |
| June 15, 1905 | do | do | do | | 51 |
| July 22, 1905 | do | do | do | | 51 |
| Aug. 24, 1905 | do | do | do | | 37 |
| Aug. 25, 1905 | do | do | do | | 29 |
| Do | do | do | do | | 41 |
| June 15, 1905 | Cottonwood Creek | do | Near Brownell, Cal., J. F. ranch. | | 10.2 |
| Aug. 30, 1905 | do | do | do | | 12.6 |
| Feb. 13, 1906 | do | do | do | | 14 |
| Sept. 26, 1906 | do | | do | | 12.2 |
| Aug. 20, 1907 | do | Lower Klamath Falls. | Sec. 14, T. 47 N., R. 8 E., Cal. | | 13 |
| May 6, 1908 | do | do | Near J. F. ranch, Cal | | 16 |
| July 3, 1908 | do | do | do | | 21 |
| Nov. 8, 1908 | do | do | do | | 14 |
| June 3, 1909 | do | do | do | | 20.1 |
| June 30, 1909 | do | do | do | | 16.9 |
| Sept. 16, 1909 | do | do | do | | 15.3 |
| July 26, 1910 | do | do | do | | 2 |
| Sept. 20, 1910 | do | do | do | | 16 |
| June 18, 1905 | Doris Creek | do | Doris ranch, Cal | | 6.1 |
| Feb. 14, 1906 | do | do | do | | 8 |
| Mar. 22, 1906 | do | do | do | | 11.6 |
| Sept. 26, 1906 | do | do | do | | 8.4 |
| May 6, 1908 | do | do | do | | 8 |
| July 2, 1908 | do | do | do | | 7.6 |
| Nov. 8, 1908 | do | do | do | | 6.5 |
| June 3, 1909 | do | do | 7 miles east of Doris | | 4.5 |
| June 29, 1909 | do | do | do | | 6.1 |
| Nov. 28, 1908 | Fords Spring | Willow Creek | Near Brownell, Cal | | 2 |
| Aug. 18, 1905 | Hot Springs Creek | Lower Klamath Lake. | Near Klamath Falls, Oreg. | | 4.4 |
| Sept. 15, 1909 | Klamath Straits | do | Near Ady, Oreg | | 68 |
| Oct. 2, 1909 | do | do | do | | 359 |
| May 18, 1905 | Sheepy Creek | do | 2 miles east of Doris ranch. | | 27 |
| June 18, 1905 | do | do | do | | 27 |
| May 7, 1908 | do | do | Near mouth, Doris, Cal | | 32 |
| July 4, 1908 | do | do | do | | 34 |
| Nov. 9, 1908 | do | do | do | | 40 |
| Sept. 15, 1909 | do | do | do | | 36 |
| Sept. 20, 1910 | do | do | Lower marsh | | 35 |
| Aug. 20, 1907 | Slow Creek | do | Sec. 11, T. 47 N., R. 1 E | | [a] 2 |
| May 14, 1905 | Van Brimmer ditch, north branch. | do | 1 mile below heading | 1.95 | 6 |
| May 21, 1905 | do | do | do | 1.99 | 6.2 |
| June 15, 1905 | do | do | do | 2.21 | 7.6 |
| July 24, 1905 | do | do | do | 2.34 | 9.7 |
| Do | do | do | do | 2.34 | 9.5 |
| Aug. 24, 1905 | do | do | do | 2.20 | 4.6 |
| May 14, 1905 | Van Brimmer ditch, south branch. | do | do | 4.01 | 24 |
| May 21, 1905 | do | do | do | 3.78 | 21 |
| June 14, 1905 | do | do | do | 3.92 | 20 |
| July 22, 1905 | do | do | do | 3.84 | 11.5 |
| Aug. 24, 1905 | do | do | do | 3.72 | 7.5 |
| Do | do | do | do | 3.85 | 9.9 |
| Aug. 25, 1905 | do | do | do | 4.12 | 16.3 |
| Do | do | do | do | 3.40 | 2.6 |
| Do | do | do | do | 3.55 | 4.3 |
| May 20, 1905 | Willow Creek | do | Near Brownell | | 12.3 |
| June 15, 1905 | do | do | do | | 11.5 |
| Aug. 30, 1905 | do | do | do | | 9.7 |
| Nov. 23, 1905 | do | do | do | | 11 |

[a] Estimated.

*Miscellaneous measurements in Lower Klamath Lake drainage basin*—Continued.

| Date. | Stream. | Tributary to— | Locality. | Gage height. | Discharge. |
|---|---|---|---|---|---|
| | | | | *Feet.* | *Sec.-ft.* |
| Feb. 13, 1906 | Willow Creek | Lower Klamath Lake. | Near Brownell | | 13 |
| Mar. 24, 1906 | ....do | ....do | ....do | | 17.2 |
| Sept. 26, 1906 | ....do | ....do | ....do | | 13 |
| Aug. 20, 1907 | ....do | ....do | ....do | | 2.8 |
| May 6, 1908 | ....do | ....do | ....do | | 19 |
| July 3, 1908 | ....do | ....do | ....do | | 15 |
| Nov. 8, 1908 | ....do | ....do | ....do | | 13 |
| June 3, 1909 | ....do | ....do | Near Davis ranch, Cal. | | 9.9 |
| June 30, 1909 | ....do | ....do | Road from Doris, Cal., to Merrill, Oreg. | | 10.5 |
| Sept. 16, 1909 | ....do | ....do | ....do | | 9.6 |
| July 26, 1910 | ....do | ....do | Near Davis School | | 9.7 |
| Sept. 21, 1909 | ....do | ....do | ....do | | 16 |

*Miscellaneous measurements in Tule Lake drainage basin.*

| Date. | Stream. | Tributary to— | Locality. | Discharge. |
|---|---|---|---|---|
| | | | | *Sec.-ft.* |
| July 19, 1905 | Boards ditch | Lost River | Near Olene, Oreg. | 0.3 |
| May 31, 1905 | Browne's west canal | ....do | Near Bonanza, Oreg. | 5.6 |
| June 2, 1905 | Griffith canal | ....do | Near Olene, Oreg. | 1.5 |
| June 13, 1905 | ....do | ....do | ....do | 1.9 |
| June 25, 1905 | ....do | ....do | ....do | 1.3 |
| June 23, 1905 | Horton ditch | ....do | Poe Valley, Oreg. | 4.4 |
| May 23, 1904 | Lost River | Tule Lake | Olene, Oreg. | 961 |
| June 10, 1904 | ....do | ....do | ....do | 322 |
| May 19, 1904 | ....do | ....do | Langells Valley, Oreg. | 746 |
| Mar. 17, 1908 | ....do | ....do | 10 miles above Merrill, Oreg. | 1,300 |
| Oct. 22, 1909 | ....do | ....do | 4 miles west of Bonanza, Oreg. | 98 |
| Nov. 22, 1909 | ....do | ....do | Upper end of Langells Valley, Oreg. | 656 |
| May 13, 1907 | Lost River, East Fork | Lost River | Sec. 3, T. 48 N., R. 7 E., Cal. | 2 |
| May 20, 1904 | Miller Creek | ....do | Near Lorella, Oreg. | 326 |
| May 16, 1908 | Olene Springs | ....do | Near Olene, Oreg. | 2.9 |
| Mar. 28, 1911 | Buck Creek | ....do | Yonna | 41 |
| June 13, 1905 | Phillip's wheel canal | ....do | 9 miles above Merrill, Oreg. | 1.2 |
| July 25, 1905 | ....do | ....do | ....do | .2 |
| Mar. 28, 1911 | Surface water | ....do | Clear Lake | 144 |
| Apr. 13, 1908 | Tule Lake outlet[a] | | Near Scorpion Point, Cal. | 14.4 |
| Apr. 23, 1908 | ....do | | ....do | 14.4 |
| May 3, 1908 | ....do | | ....do | 16.4 |
| May 12, 1908 | ....do | | ....do | 14.2 |
| June 10, 1908 | ....do | | ....do | 11.9 |
| June 26, 1908 | ....do | | ....do | 12.5 |
| July 10, 1908 | ....do | | ....do | 14.4 |
| Dec. 7, 1908 | ....do | | ....do | 33 |
| Dec. 23, 1908 | ....do | | ....do | 29 |
| Mar. 16, 1909 | ....do | | Scorpion Point, Cal. | 30 |
| Sept. 17, 1909 | ....do | | ....do | 30 |
| June 2, 1905 | Swingle flume canal | Miller Creek | Near Lorella, Oreg. | .2 |

[a] This is an artificial outlet constructed by the United States Reclamation Service.

## SMITH RIVER BASIN.

### MIDDLE FORK OF SMITH RIVER NEAR CRESCENT CITY, CAL.

This station, which is located at a highway bridge in the S. ½ sec. 20, T. 17 N., R. 2 E., 800 feet above the junction of North and Middle Forks, one-eighth of a mile east of Gasquet, and 14 miles northeast of Crescent City, was established September 8, 1911.

There is a chain gage attached to the downstream guard rail of bridge. The channel is rough and composed of bowlders and gravel. The section is probably permanent. The area drained is 146 square

miles. Discharge measurements are made from the bridge or by wading.

The gage-height record was furnished by the United States Forest Service.

Estimates of discharge are withheld until additional data are secured.

*Discharge measurements of Middle Fork of Smith River near Crescent City, Cal., in 1911-12.*

| Date. | Hydrographer. | Gage height. | Discharge. | Date. | Hydrographer. | Gage height. | Discharge. |
|---|---|---|---|---|---|---|---|
| 1911. | | *Feet.* | *Sec.-ft.* | 1912. | | *Feet.* | *Sec.-ft.* |
| Sept. 8 | E. O. Christiansen | [illegible] | [illegible] | Mar. [illegible] | [illegible] | [illegible] | [illegible] |
| Dec. 5 | do | [illegible] | [illegible] | May 9 | [illegible] | [illegible] | [illegible] |
| | | | | May [illegible] | [illegible] | [illegible] | [illegible] |
| 1912. | | | | June 5 | [illegible] | [illegible] | [illegible] |
| Feb. 27 | E. O. Christiansen | 5.95 | [illegible] | | | | |

*Daily gage height, in feet, of Middle Fork of Smith River near Crescent City, Cal., for 1911-12.*

| Day. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. | June. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 2 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 3 | | 4.10 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 4 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 5 | | 4.15 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| 6 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 8 | 4.10 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] |
| 9 | 4.10 | 4.45 | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 10 | 4.10 | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] | [illegible] |
| 11 | 4.10 | | 4.52 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 12 | 4.15 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 13 | 4.25 | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 14 | 4.12 | 4.50 | | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 15 | 4.12 | | [illegible] | | | [illegible] | [illegible] | | [illegible] | [illegible] |
| 16 | 4.12 | | | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 17 | 4.10 | | | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 18 | | | | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 19 | | | | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 20 | | | | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 21 | | | | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 22 | | | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 23 | | 4.05 | | [illegible] | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 24 | | | | [illegible] | [illegible] | [illegible] | | | [illegible] | [illegible] |
| 25 | 4.08 | 4.05 | | | [illegible] | [illegible] | [illegible] | | [illegible] | [illegible] |
| 26 | 4.15 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 27 | 4.10 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 28 | 4.10 | 4.05 | | | | [illegible] | [illegible] | | [illegible] | [illegible] |
| 29 | 4.08 | | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 30 | 4.05 | | 4.42 | | [illegible] | | [illegible] | [illegible] | [illegible] | [illegible] |
| 31 | | | | | | | | | [illegible] | |

## NORTH FORK OF SMITH RIVER NEAR CRESCENT CITY, CAL.

This station, which is located half a mile northeast of Gasquet, in the NE. ¼ sec. 20, T. 17 N., R. 2 E., half a mile above the junction of North and Middle forks and about 15 miles northeast of Crescent City, was established September 8, 1911.

[illegible]

[illegible]

[illegible] Mason, [illegible]

[illegible]

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[illegible]

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[illegible] River at: [illegible]

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